BILLING

Report/Measurement:	
Usage Data Delivery Accuracy	
Definition:	
This measurement captures the percentage of recorded usage and recorded usage data packets transmitted error free and in an agreed upon format to the appropriate CLEC, as well as a parity measurement against BST Data Packet Transmission.	
Exclusions:	
None	
Business Rules:	
The accuracy of usage records delivered by BST to the CLEC must provide CLECs with the opportunity to deliver bills at least as accurate as those delivered by BST.	
Calculations:	
Usage Data Delivery Accuracy = Σ [(Total number of usage data packs sent during current month) – (Total number of usage data packs requiring retransmission during current month)] / (Total number of usage data packs sent during current month) X 100	
Report Structure:	
• CLEC Specific • CLEC Aggregate • BST Aggregate	
Level of Disaggregation:	
• Product / Invoice Type ➢ Resale ➢ UNE ➢ Interconnection • Geographic Scope ➢ Region	
DATA RETAINED RELATING TO CLEC EXPERIENCE:	**DATA RETAINED RELATING TO BST PERFORMANCE:**
• Report Month • Record Type ➢ BellSouth Recorded ➢ Non BellSouth Recorded	• Report Month • Record Type
Retail Analog/Benchmark:	
Retail Analog	

BILLING

Report/Measurement:	
Usage Data Delivery Completeness	
Definition:	
This measurement provides percentage of complete and accurately recorded usage data (usage recorded by BellSouth and usage recorded by other companies and sent to BST for biling) that is processed and transmitted to the CLEC within thirty (30) days of the message recording date. A parity measure is also provided showing completeness of BST messages processed and transmitted via CMDS. BellSouth delivers its own retail usage from recording location to billing location via CMDS as well as delivering billing data to other companies. Timeliness, Completeness and Mean Time to Deliver Usage measures are reported on the same report.	
Exclusions:	
None	
Business Rules:	
The purpose of these measurements is to demonstrate the level of quality of usage data delivered to the appropriate CLEC. Method of delivery is at the option of the CLEC.	
Calculation:	
Usage Data Delivery Completeness = Σ(Total number of Recorded usage records delivered during the current month that are within thirty (30) days of the message recording date) / Σ(Total number of Recorded usage records delivered during the current month) X 100	
REPORT STRUCTURE	
• CLEC Specific • CLEC Aggregate • BST Aggregate	
Level of Disaggregation:	
➢ • Geographic Scope ➢ Region	
DATA RETAINED RELATING TO CLEC EXPERIENCE:	**DATA RETAINED RELATING TO BST PERFORMANCE:**
• Report Month • Record Type ➢ BellSouth Recorded ➢ Non BellSouth Recorded	• Report Monthly • Record Type
Retail Analog/Benchmark:	
Retail Analog	

BILLING

Report/Measurement:	
Usage Data Delivery Timeliness	
Definition:	
This measurement provides percentage of recorded usage data (usage recorded by BST and usage recorded by other companies and sent to BST for billing) that is delivered to the appropriate CLEC within six (6) calendar days from the receipt of the initial recording. A parity measure is also provided showing timeliness of BST messages processed and transmitted via CMDS. Timeliness, Completeness and Mean Time to Deliver Usage measures are reported on the same report.	
Exclusions:	
None	
Business Rules:	
The purpose of this measurement is to demonstrate the level of timeliness for processing and transmission of usage data delivered to the appropriate CLEC. The usage data will be mechanically transmitted or mailed to the CLEC data processing center once daily. The Timeliness interval of usage recorded by other companies is measured from the date BST receives the records to the date BST distributes to the CLEC. Method of delivery is at the option of the CLEC.	
Calculation:	
Usage Data Delivery Timeliness = Σ (Total number of usage records sent within six (6) calendar days from initial recording/receipt) / Σ (Total number of usage records sent) X 100	
Report Structure:	
• CLEC Aggregate • CLEC Specific • BST Aggregate	
Level of Disaggregation:	
• • Geographic Scope ➢ Region	
DATA RETAINED RELATING TO CLEC EXPERIENCE:	**DATA RETAINED RELATING TO BST PERFORMANCE:**
• Report Month • Record Type ➢ BellSouth Recorded ➢ Non-BellSouth Recorded	• Report Monthly • Record Type
Retail Analog/Benchmark:	
Retail Analog	

BILLING

Report/Measurement:	
Mean Time to Deliver Usage	
Definition:	
This measurement provides the average time it takes to deliver Usage Records to a CLEC. A parity measure is also provided showing timeliness of BST messages processed and transmitted via CMDS. Timeliness, Completeness and Mean Time to Deliver Usage measures are reported on the same report.	
Exclusions:	
None	
Business Rules:	
The purpose of this measurement is to demonstrate the average number of days it takes to deliver Usage data to the appropriate CLEC. Usage data is mechanically transmitted or mailed to the CLEC data processing center once daily. Method of delivery is at the option of the CLEC.	
Calculation:	
Mean Time to Deliver Usage = Σ (Record volume X estimated number of days to deliver the Usage Record) / total record volume	
Report Structure:	
• CLEC Aggregate • CLEC Specific • BST Aggregate	
Level of Disaggregation:	
• • Geographic Scope ➢ Region	
DATA RETAINED RELATING TO CLEC EXPERIENCE:	**DATA RETAINED RELATING TO BST PERFORMANCE:**
• Report Month • Record Type ➢ BellSouth Recorded ➢ Non-BellSouth Recorded	• Report Monthly • Record Type
Retail Analog/Benchmark:	
Retail Analog	

OPERATOR SERVICES AND DIRECTORY ASSISTANCE

Report/Measurement:
Speed to Answer Performance/Average Speed to Answer – Toll
Definition:
Measurement of the average time in seconds calls wait before answered by a toll operator.
Exclusions:
Calls abandoned by customers are not reflected in the average speed to answer but are reflected in the conversion tables where the percent answered within "X" seconds is determined.
Business Rules:
The call waiting measurement scan starts when the customer enters the queue and ends when a BST representative answers the call. The average speed to answer is determined by measuring and accumulating the seconds of wait time from the entry of a customer into the BST call management system queue until the customer is transferred to a BST representative. No distinction is made between CLEC customers and BST customers.
Calculation:
The Average Speed to Answer for toll is calculated by using data from monthly system measurement reports taken from the centralized call routing switches. The "total call waiting seconds" is a sub-component of this measure which BST systems calculate by monitoring the number of calls in queue throughout the day multiplied by the time (in seconds) between monitoring events. The "total calls served" is the other sub-component of this measure, which BST systems record as the total number of calls handled by Operator Services toll centers. Since calls abandoned are not reflected in the calculation, the percent answered within the required timeframe is determined by using conversion tables with input for the abandonment rate.
Report Structure:
Reported for the aggregate of BST and CLECs • State
Level of Disaggregation:
None
DATA RETAINED (ON AGGREGATE BASIS)
For the items below, BST's Performance Measurement Analysis Platform (PMAP) receives a final computation; therefore, no raw data file is available in PMAP. • Month • Call Type (Toll) • Average Speed of Answer
Retail Analog/Benchmark
Parity by Design

OPERATOR SERVICES AND DIRECTORY ASSISTANCE

Report/Measurement:
Speed to Answer Performance/Percent Answered within "X" Seconds – Toll
Definition:
Measurement of the percent of toll calls that are answered in less than "X" seconds. The number of seconds represented by "X" is thirty, except where a different regulatory benchmark has been set against the Average Speed to Answer by a State Commission.
Exclusions:
Calls abandoned by customers are not reflected in the average speed to answer but are reflected in the conversion tables where the percent answered within "X" seconds is determined.
Business Rules:
The call waiting measurement scan starts when the customer enters the queue and ends when a BST representative answers the call. The average speed to answer is determined by measuring and accumulating the seconds of wait time from the entry of a customer into the BST call management system queue until the customer is transferred to a BST representative. No distinction is made between CLEC customers and BST customers.
Calculation:
The Percent Answered within "X" Seconds measurement for toll is derived by using the BellCore Statistical Answer Conversion Tables, to convert the Average Speed to Answer measure into a percent of calls answered within "X" seconds. The BellCore Conversion Tables are specific to the defined parameters of work time, number of operators, max queue size and call abandonment rates.
Report Structure:
Reported for the aggregate of BST and CLECs • State
Level of Disaggregation:
None
DATA RETAINED (ON AGGREGATE BASIS)
For the items below, BST's Performance Measurement Analysis Platform (PMAP) receives a final computation; therefore, no raw data file is available in PMAP. • Month • Call Type (Toll) • Average Speed of Answer
Retail Analog/Benchmark
Parity by Design

OPERATOR SERVICES AND DIRECTORY ASSISTANCE

Report/Measurement:
Speed to Answer Performance/Average Speed to Answer – Directory Assistance (DA)
Definition:
Measurement of the average time in seconds calls wait before answer by a DA operator.
Exclusions:
Calls abandoned by customers are not reflected in the average speed to answer but are reflected in the conversion tables where the percent answered within "X" seconds is determined.
Business Rules:
The call waiting measurement scan starts when the customer enters the queue and ends when a BST representative answers the call. The average speed to answer is determined by measuring and accumulating the seconds of wait time from the entry of a customer into the BST call management system queue until the customer is transferred to a BST representative. No distinction is made between CLEC customers and BST customers.
Calculation:
The Average Speed to Answer for DA is calculated by using data from monthly system measurement reports taken from the centralized call routing switches. The "total call waiting seconds" is a sub-component of this measure which BST systems calculate by monitoring the number of calls in queue throughout the day multiplied by the time (in seconds) between monitoring events. The "total calls served" is the other sub-component of this measure, which BST systems record as the total number of calls handled by Operator Services DA centers. Since calls abandoned are not reflected in the calculation, the percent answered within the required timeframe is determined by using conversion tables with input for the abandonment rate.
Report Structure:
Reported for the aggregate of BST and CLECs • State
Level of Disaggregation:
None
DATA RETAINED (ON AGGREGATE BASIS)
For the items below, BST's Performance Measurement Analysis Platform (PMAP) receives a final computation; therefore, no raw data file is available in PMAP. • Month • Call Type (DA) • Average Speed of Answer
Retail Analog/Benchmark
Parity by Design

OPERATOR SERVICES AND DIRECTORY ASSISTANCE

Report/Measurement:
Speed to Answer Performance/Percent Answered within "X" Seconds – Directory Assistance (DA)
Definition:
Measurement of the percent of DA calls that are answered in less than "X" seconds. The number of seconds represented by "X" is twenty, except where a different regulatory benchmark has been set against the Average Speed to Answer by a State Commission.
Exclusions:
Calls abandoned by customers are not reflected in the average speed to answer but are reflected in the conversion tables where the percent answered within "X" seconds is determined.
Business Rules:
The call waiting measurement scan starts when the customer enters the queue and ends when a BST representative answers the call. The average speed to answer is determined by measuring and accumulating the seconds of wait time from the entry of a customer into the BST call management system queue until the customer is transferred to a BST representative. No distinction is made between CLEC customers and BST customers.
Calculation:
The Percent Answered within "X" Seconds measurement for DA is derived by using the BellCore Statistical Answer Conversion Tables, to convert the Average Speed to Answer measure into a percent of calls answered within "X" seconds. The BellCore Conversion Tables are specific to the defined parameters of work time, number of operators, max queue size and call abandonment rates.
Report Structure:
Reported for the aggregate of BST and CLECs • State
Level of Disaggregation:
None
DATA RETAINED (ON AGGREGATE BASIS)
For the items below, BST's Performance Measurement Analysis Platform (PMAP) receives a final computation; therefore, no raw data file is available in PMAP. • Month • Call Type (DA) • Average Speed of Answer
Retail Analog/Benchmark
Parity by Design

E911

Report/Measurement:
E911/Timeliness
Definition:
Measures the percentage of batch orders for E911 database updates (to CLEC resale and BST retail records) processed successfully within a 24-hour period.
Exclusions:
• Any resale order canceled by a CLEC • Facilities-based CLEC orders
Business Rules:
The 24-hour processing period is calculated based on the date and time processing starts on the batch orders and the date and time processing stops on the batch orders. Mechanical processing starts when SCC (BST's E911 vendor) receives E911 files containing batch orders extracted from BST's Service Order Communication System (SOCS). Processing stops when SCC loads the individual records to the E911 database. No distinctions are made between CLEC resale records and BST retail records.
Calculation:
E911 Timeliness = Σ (Number of batch orders processed within 24 hours ÷ Total number of batch orders submitted) X 100
Report Structure:
Reported for the aggregate of CLEC resale updates and BST retail updates • State • Region
Levels of Disaggregation:
None
DATA RETAINED
• Report month • Aggregate data
Retail Analog/Benchmark
Parity by Design

E911

Report/Measurement:
E911/Accuracy
Definition:
Measures the individual E911 telephone number (TN) record updates (to CLEC resale and BST retail records) processed successfully for E911 with no errors.
Exclusions:
• Any resale order canceled by a CLEC • Facilities-based CLEC orders
Business Rules:
Accuracy is based on the number of records processed without error at the conclusion of the processing cycle. Mechanical processing starts when SCC (BST's E911 vendor) receives E911 files containing telephone number (TN) records extracted from BST's Service Order Communication System (SOCS). No distinctions are made between CLEC resale records and BST retail records.
Calculation:
E911 Accuracy = Σ(Number of record individual updates processed with no errors ÷ Total number of individual record updates) X 100
Report Structure:
Reported for the aggregate of CLEC resale updates and BST retail updates • State • Region
Level of Disaggregation:
None
DATA RETAINED
• Report month • Aggregate data
Retail Analog/Benchmark
Parity by Design

E911

Report/Measurement:
E911/Mean Interval
Definition:
Measures the mean interval processing of E911 batch orders (to update CLEC resale and BST retail records).
Exclusions:
• Any resale order canceled by a CLEC • Facilities-based CLEC orders
Business Rules:
The processing period is calculated based on the date and time processing starts on the batch orders and the date and time processing stops on the batch orders. Data is posted in 4-hour increments up to and beyond 24 hours. No distinctions are made between CLEC resale records and BST retail records.
Calculation:
E911 Mean Interval = $\sum$ (Date and time of batch order completion – Date and time of batch order submission) ÷ (Number of batch orders completed)
Report Structure:
Reported for the aggregate of CLEC resale updates and BST retail updates • State • Region
Level of Disaggregation:
None
DATA RETAINED (ON AGGREGATE BASIS)
• Report month • Aggregate data
Retail Analog/Benchmark
Parity by Design

TRUNK GROUP PERFORMANCE

Report/Measurement:

Trunk Group Service Report

Definition:

A report of the percent blocking above the Measured Blocking Threshold (MBT) on all final trunk groups between CLEC Points of Termination and BST end offices or tandems.

Exclusions:

- Trunk groups for which valid traffic data is not available
- High use trunk groups

Business Rules:

Traffic trunking data measurements are validated and processed by the Total Network Data System/Trunking (TNDS/TK), a Telcordia (BellCore) supported application, on an hourly basis for Average Business Days (Monday through Friday). The traffic load sets, including offered load and observed blocking ratio (calls blocked divided by calls attempted), are averaged for a 20 day period, and the busy hour is selected. The busy hour average data for each trunk group is captured for reporting purposes. Although all trunk groups are available for reporting, the report highlight those trunk groups with blocking greater than the Measured Blocking Threshold (MBT) and the number of consecutive monthly reports that the trunk group blocking has exceeded the MBT. The MBT for CTTG is 2% and the MBT for all other trunk groups is 3%.

Calculation:

Measured blocking = (Total number of blocked calls) / (Total number of attempted calls) X 100

Report Structure:

- BST Aggregate
  - CTTG
  - Local
- CLEC Aggregate
  - BST Administered CLEC Trunk
  - CLEC Administered CLEC Trunk
- CLEC Specific
  - BST Administered CLEC Trunk
  - CLEC Administered CLEC Trunk

Level of Disaggregation:

State

DATA RETAINED RELATING TO CLEC EXPERIENCE	DATA RETAINED RELATING TO BST EXPERIENCE
• Report month • Total trunk groups • Total trunk groups for which data is available • Trunk groups with blocking greater than the MBT • Percent of trunk groups with blocking greater than the MBT	• Report month • Total trunk groups • Total trunk groups for which data is available • Trunk groups with blocking greater than the MBT • Percent of trunk groups with blocking greater than the MBT

Retail Analog/Benchmark:

Retail Analog

TRUNK GROUP PERFORMANCE

Report/Measurement:

Trunk Group Service Detail

Definition:

A detailed list of all final trunk groups between CLEC Points of Presence and BST end offices or tandems, and the actual blocking performance when the blocking exceeds the Measured Blocking Threshold (MBT) for the trunk groups.

Exclusions:

- Trunk groups for which valid traffic data is not available
- High use trunk groups

Business Rules:

Traffic trunking data measurements are validated and processed by the Total Network Data System/Trunking (TNDS/TK), a Telcordia (Bellcore) supported application, on an hourly basis for Average Business Days (Monday through Friday). The traffic load sets, including offered load and observed blocking ratio (calls blocked divided by calls attempted), are averaged for a 20 day period, and the busy hour is selected. The busy hour average data for each trunk group is captured for reporting purposes. Although all trunk groups are available for reporting, the report highlight those trunk groups with blocking greater than the Measured Blocking Threshold (MBT) and the number of consecutive monthly reports that the trunk group blocking has exceeded the MBT. The MBT for CTTG is 2% and the MBT for all other trunk groups is 3%.

Calculation:

Measured Blocking = (Total number of blocked calls) / (Total number of attempted calls) X 100

Report Structure:

- BST Specific
  - Traffic Identity
  - TGSN
  - Tandem
  - End Office
  - Description
  - Observed Blocking
  - Busy Hour
  - Number Trunks
  - Valid study days
  - Number reports
  - Remarks
- CLEC Specific
  - Traffic Identity
  - TGSN
  - Tandem
  - CLEC POT
  - Description
  - Observed Blocking
  - Busy Hour
  - Number Trunks
  - Valid study days
  - Number reports
  - Remarks

Level of Disaggregation:

State

DATA RETAINED RELATING TO CLEC EXPERIENCE	DATA RETAINED RELATING TO BST EXPERIENCE
• Report month • Total trunk groups • Total trunk groups for which data is available • Trunk groups with blocking greater than the MBT • Percent of trunk groups with blocking greater than the MBT • Traffic identity, TGSN, end points, description, busy hour, valid study days, number reports	• Report month • Total trunk groups • Total trunk groups for which data is available • Trunk groups with blocking greater than the MBT • Percent of trunk groups with blocking greater than the MBT • Traffic identity, TGSN, end points, description, busy hour, valid study days, number reports

Retail Analog/Benchmark:

Retail Analog

COLLOCATION

Report/Measurement:
Collocation/Average Response Time
Definition:
Measures the average time (counted in business days) from the receipt of a complete and accurate collocation application (including receipt of application fees) to the date BellSouth responds in writing.
Exclusions:
• Requests to augment previously completed arrangements • Any application cancelled by the CLEC
Business Rules:
The clock starts on the date that BST receives a complete and accurate collocation application accompanied by the appropriate application fee. The clock stops on the date that BST returns a response. The clock will restart upon receipt of changes to the original application request.
Calculation:
Average Response Time = Σ(Request Response Date) – (Request Submission Date) / Count of Responses Returned within Reporting Period.
Report Structure:
• Individual CLEC (alias) aggregate • Aggregate of all CLECs
Level of Disaggregation:
• State, Region and further geographic disaggregation as required by State Commission Order • Virtual • Physical
DATA RETAINED:
• Report period • Aggregate data
Retail Analog/Benchmark:
Under development

COLLOCATION

Report/Measurement:
Collocation/Average Arrangement Time
Definition:
Measures the average time (counted in business days) from the receipt of a complete and accurate Bona Fide firm order (including receipt of appropriate fee) to the date BST completes the collocation arrangement.
Exclusions:
• Any Bona Fide firm order cancelled by the CLEC • Bona Fide firm orders to augment previously completed arrangements • Time for BST to obtain permits • Time during which the collocation contract is being negotiated
Business Rules:
The clock starts on the date that BST receives a complete and accurate Bona Fide firm order accompanied by the appropriate fee. The clock stops upon submission of the permit request and restarts upon receipt of the approved permit. Changes (affecting the provisioning interval or capital expenditures) that are submitted while provisioning is in progress may alter the completion date. The clock stops on the date that BST completes the collocation arrangement.
Calculation:
Average Arrangement Time = Σ(Date Collocation Arrangement is Complete) – (Date Order for Collocation Arrangement Submitted) / Total Number of Collocation Arrangements Completed during Reporting Period.
Report Structure:
• Individual CLEC (alias) aggregate • Aggregate of all CLECs
Level of Disaggregation:
• State, Region and further geographic disaggregation as required by State Commission Order • Virtual • Physical
DATA RETAINED:
• Report period • Aggregate data
Retail Analog/Benchmark:
Under development

COLLOCATION

Report/Measurement:
Collocation/Percent of Due Dates Missed
Definition:
Measures the percent of missed due dates for collocation arrangements.
Exclusions:
• Any Bona Fide firm order cancelled by the CLEC • Bona Fide firm orders to augment previously completed arrangements • Time for BST to obtain permits • Time during which the collocation contract is being negotiated
Business Rules:
The clock starts on the date that BST receives a complete and accurate Bona Fide firm order accompanied by the appropriate fee. The clock stops on the date that BST completes the collocation arrangement.
Calculation:
% of Due Dates Missed = Σ (Number of Orders not completed w/i ILEC Committed Due Date during Reporting Period) / Number of Orders Completed in Reporting Period) X 100
Report Structure:
• Individual CLEC (alias) aggregate • Aggregate of all CLECs
Level of Disaggregation:
• State, Region and further geographic disaggregation as required by State Commission Order • Virtual • Physical
DATA RETAINED:
• Report period • Aggregate data
Retail Analog/Benchmark:
Under development

APPENDIX A: REPORTING SCOPE*

Standard Service Groupings	*Pre-Order, Ordering* • Resale Residence • Resale Business • Resale Special • Local Interconnection Trunks • UNE • UNE - Loops w/LNP *Provisioning* • UNE Non-Design • UNE Design • UNE Loops w/LNP • Local Interconnection Trunks • Resale Residence • Resale Business • Resale Design • BST Trunks • BST Residence Retail • BST Business Retail *Maintenance and Repair* • Local Interconnection Trunks • UNE Non-Design • UNE Design • Resale Residence • Resale Business • BST Interconnection Trunks • BST Residence Retail • BST Business Retail Local Interconnection Trunk Group Blockage • BST CTTG Trunk Groups • CLEC Trunk Groups

Appendix A: Reporting Scope

Standard Service Order Activities *These are the generic BST/CLEC service order activities which are included in the Pre-Ordering, Ordering, and Provisioning sections of this document. It is not meant to indicate specific reporting categories.*	• New Service Installations • Service Migrations Without Changes • Service Migrations With Changes • Move and Change Activities • Service Disconnects (Unless noted otherwise)
Pre-Ordering Query Types: **Maintenance Query Types:**	• Address • Telephone Number • Appointment Scheduling • Customer Service Record • Feature Availability
Report Levels	• CLEC RESH • CLEC MSA • CLEC State • CLEC Region • Aggregate CLEC State • Aggregate CLEC Region • BST State • BST Region

* Scope is report, data source and system dependent, and, therefore, will differ with each report.

APPENDIX B: GLOSSARY OF ACRONYMS AND TERMS

A	**ACD**	Automatic Call Distributor - A service that provides status monitoring of agents in a call center and routes high volume incoming telephone calls to available agents while collecting management information on both callers and attendants.
	AGGREGATE	Sum total of all items in like category, e.g. CLEC aggregate equals the sum total of all CLECs' data for a given reporting level.
	ASR	Access Service Request - A request for access service terminating delivery of carrier traffic into a Local Exchange Carrier's network.
	ATLAS	Application for Telephone Number Load Administration System - The BellSouth Operations System used to administer the pool of available telephone numbers and to reserve selected numbers from the pool for use on pending service requests/service orders.
	ATLASTN	ATLAS software contract for Telephone Number
	AUTO CLARIFICATION	The number of LSRs that were e·.tronically rejected from LESOG and electronically returned to the CL..C for correction.
B	**BILLING**	The process and functions by which billing data is collected and by which account information is processed in order to render accurate and timely billing.
	BOCRIS	Business Office Customer Record Information System - A front-end presentation manager used by BellSouth organizations to access the CRIS database.
	BRC	Business Repair Center – The BellSouth Business Systems trouble receipt center which serves large business and CLEC customers.
	BST	BellSouth Telecommunications, Inc.
C	**CKTID**	A unique identifier for elements combined in a service configuration
	CLEC	Competitive Local Exchange Carrier
	CMDS	Centralized Message Distribution System - BellCore administered national system used to transfer specially formatted messages among companies.
	COFFI	Central Office Feature File Interface - A BellSouth Operations System database which maintains Universal Service Order Code (USOC) information based on current tariffs.

Appendix B: Glossary of Acronyms and Terms - Continued

C	COFIUSOC	COFFI software contract for feature/service information
	CRIS	Customer Record Information System - The BellSouth proprietary corporate database and billing system for non-access customers and services.
	CRSACCTS	CRIS software contract for CSR information
	CSR	Customer Service Record
	CTTG	Common Transport Trunk Group - Final trunk groups between BST & Independent end offices and the BST access tandems.
D	DESIGN	Design Service is defined as any Special or Plain Old Telephone Service Order which requires BellSouth Design Engineering Activities
	DISPOSITION & CAUSE	Types of trouble conditions, e.g. No Trouble Found, Central Office Equipment, Customer Premises Equipment, etc.
	DLETH	Display Lengthy Trouble History - A history report that gives all activity on a line record for trouble reports in LMOS
	DLR	Detail Line Record - All the basic information maintained on a line record in LMOS, e.g. name, address, facilities, features etc.
	DOE	Direct Order Entry System - An internal BellSouth service order entry system used by BellSouth Service Representatives to input business service orders in BellSouth format.
	DSAP	DOE (Direct Order Entry) Support Application - The BellSouth Operations System which assists a Service Representative or similar carrier agent in negotiating service provisioning commitments for non-designed services and UNEs.
	DSAPDDI	DSAP software contract for schedule information
E	E911	Provides callers access to the applicable emergency services bureau by dialing a 3-digit universal telephone number.
	EDI	Electronic Data Interchange - The computer-to-computer exchange of inter and/or intra company business documents in a public standard format.
F	FATAL REJECT	The number of LSRs that were electronically rejected from LEO, which checks to see of the LSR has all the required fields correctly populated
	FLOW-THROUGH	In the context of this document, LSRs submitted electronically via the CLEC mechanized ordering process that flow through to the BST OSS without manual or human intervention.
	FOC	Firm Order Confirmation - A notification returned to the CLEC confirming that the LSR has been received and accepted, including the specified commitment date.

Appendix B: Glossary of Acronyms and Terms - Continued

G		
H	HAL	"Hands Off" Assignment Logic - Front end access and error resolution logic used in interfacing BellSouth Operations Systems such as ATLAS, BOCRIS, LMOS, PSIMS, RSAG and SOCS.
	HALCRIS	HAL software contract for CSR information
I	ISDN	Integrated Services Digital Network
K		
L	LCSC	Local Carrier Service Center - The BellSouth center which is dedicated to handling CLEC LSRs, ASRs, and Preordering transactions along with associated expedite requests and escalations.
	LEGACY SYSTEM	Term used to refer to BellSouth Operations Support Systems (see OSS)
	LENS	Local Exchange Negotiation System - The BellSouth LAN/web server/OS application developed to provide both preordering and ordering electronic interface functions for CLECs.
	LEO	Local Exchange Ordering - A BellSouth system which accepts the output of EDI, applies edit and formatting checks, and reformats the Local Service Requests in BellSouth Service Order format.
	LESOG	Local Exchange Service Order Generator - A BellSouth system which accepts the service order output of LEO and enters the Service Order into the Service Order Control System using terminal emulation technology.
	LMOS	Loop Maintenance Operations System - A BellSouth Operations System that stores the assignment and selected account information for use by downstream OSS and BellSouth personnel during provisioning and maintenance activities.
	LMOS HOST	LMOS host computer
	LMOSupd	LMOS updates
	LNP	Local Number Portability - In the context of this document, the capability for a subscriber to retain his current telephone number as he transfers to a different local service provider.
	LOOPS	Transmission paths from the central office to the customer premises.
	LSR	Local Service Request – A request for local resale service or unbundled network elements from a CLEC.
M	MAINTENANCE & REPAIR	The process and function by which trouble reports are passed to BellSouth and by which the related service problems are resolved.
	MARCH	A BellSouth Operations System which accepts service orders, interprets the coding contained in the service order image, and constructs the specific switching system Recent Change command messages for input into end office switches.

Appendix B: Glossary of Acronyms and Terms – Continued

N	NC	"No Circuits" - All circuits busy announcement
O	OASIS	Obtain Availability Services Information System - A BellSouth front-end processor, which acts as an interface between COFFI and RNS. This system takes the USOCs in COFFI and translates them to English for display in RNS.
	OASISBSN	OASIS software contract for feature/service
	OASISCAR	OASIS software contract for feature/service
	OASISLPC	OASIS software contract for feature/service
	OASISMTN	OASIS software contract for feature/service
	OASISNET	OASIS software contract for feature/service
	OASISOCP	OASIS software contract for feature/service
	ORDERING	The process and functions by which resale services or unbundled network elements are ordered from BellSouth as well as the process by which an LSR or ASR is placed with BellSouth.
	OSPCM	Outside Plant Contract Management System - Provides Scheduling Information.
	OSS	Operations Support System - A support system or database which is used to mechanize the flow or performance of work. The term is used to refer to the overall system consisting of hardware complex, computer operating system(s), and application which is used to provide the support functions.
	OUT OF SERVICE	Customer has no dial tone and cannot call out.
P	POTS	Plain Old Telephone Service
	PREDICTOR	The BellSouth Operations system which is used to administer proactive maintenance and rehabilitation activities on outside plant facilities, provide access to selected work groups (e.g. RRC & BRC) to Mechanized Loop Testing and switching system I/O ports, and provide certain information regarding the attributes and capabilities of outside plant facilities.
	PREORDERING	The process and functions by which vital information is obtained, verified, or validated prior to placing a service request.
	PROVISIONING	The process and functions by which necessary work is performed to activate a service requested via an LSR or ASR and to initiate the proper billing and accounting functions.
	PSIMS	Product/Service Inventory Management System - A BellSouth database Operations System which contains availability information on switching system features and capabilities and on BellSouth service availability. This database is used to verify the availability of a feature or service in an NXX prior to making a commitment to the customer.
	PSIMSORB	PSIMS software contract for feature/service

Appendix B: Glossary of Acronyms and Terms – Continued

Q		
R	RNS	Regional Negotiation System - An internal BellSouth service order entry system used by BellSouth Consumer Services to input service orders in BellSouth format.
	RRC	Residence Repair Center - The BellSouth Consumer Services trouble receipt center which serves residential customers.
	RSAG	Regional Street Address Guide - The BellSouth database, which contains street addresses validated to be accurate with state and local governments.
	RSAGADDR	RSAG software contract for address search
	RSAGTN	RSAG software contract for telephone number search
S	SOCS	Service Order Control System - The BellSouth Operations System which routes service order images among BellSouth drop points and BellSouth Operations Systems during the service provisioning process.
	SOIR	Service Order Interface Record - any change effecting activity to a customer account by service order that impacts 911/E911.
T	TAFI	Trouble Analysis Facilitation Interface - The BellSouth Operations System that supports trouble receipt center personnel in taking and handling customer trouble reports.
	TAG	Telecommunications Access Gateway – TAG was designed to provide an electronic interface, or machine-to-machine interface for the bi-directional flow of information between BellSouth's OSSs and participating CLECs.
	TN	Telephone Number
	TOTAL MANUAL FALLOUT	The number of LSRs which are entered electronically but require manual entering into a service order generator.
U	UNE	Unbundled Network Element
V		
W	WTN	A unique identifier for elements combined in a service configuration
X		
Y		
Z		
Σ		Sum of:

APPENDIX C: BELLSOUTH'S AUDIT POLICY

BELLSOUTH'S AUDIT POLICY:

BellSouth currently provides many CLECs with audit rights as a part of their individual interconnection agreements. However, it is not reasonable for BellSouth to undergo an audit for every CLEC with which it has a contract. As of June 1999, that would equate to over 732 audits per year and that number is continually growing. BellSouth developed a proposed Audit Plan for use by the parties to an audit If requested by a Public Service Commission, BellSouth will agree to undergo a comprehensive audit of the aggregate level reports for both BellSouth and the CLECs for each of the next five (5) years (2001-2005), to be conducted by an independent third party. The results of that audit will be made available to all the parties subject to proper safeguards to protect proprietary information. This aggregate level audit includes the following specifications:

1. The cost shall be borne 50% by BellSouth and 50% by the CLECs.

2. The independent third party auditor shall be selected with input from BellSouth, the PSC, if applicable, and the CLEC(s).

3. BellSouth, the PSC and the CLECs shall jointly determine the scope of the audit.

BellSouth reserves the right to make changes to this audit policy as growth and changes in the industry dictate.

APPENDIX D MODIFICATION OF PERFORMANCE MEASUREMENTS

In the event that the FCC or any State Commission adopts, orders, or imposes on BellSouth any standards, measurements, or performance requirements in addition to or different from the standards, measurements, and performance requirements contained in this attachment, the Parties shall amend this Attachment to incorporate such standards, measurements, or performance requirements at either Party's request in accordance with Section 35 of the General Terms and Conditions of this Agreement; provided, however, that if e·spire elects to retain the performance measurements set forth in this Attachment rather than to adopt the standards, measurements, or performance measurements so ordered or imposed, BellSouth will continue to provide to e·spire the performance measurements set forth herein.

EXHIBIT B

ENFORCEMENT MEASUREMENTS
TABLE OF CONTENTS

* These reports are subject to change due to regulatory requirements, corrections, clarifications, ect.

PRE-ORDERING - OSS

Report/Measurement :	
Percent Response Received within 'X" seconds	
Definition:	
Proportion of requests responded to within "X" seconds for accessing legacy data associated with appointment scheduling, service & feature availability, address verification, request for Telephone Numbers (TNs), and Customer Service Records (CSRs).	
Exclusions:	
None	
Business Rules:	
The response interval starts when the client application (LENS or TAG for CLECs and RNS for BST) submits a request to the legacy system and ends when the appropriate response is returned to the client application. The number of legacy accesses during the reporting period which take less than 2.3 seconds are captured.	
Level of Disaggregation:	
• Region	
Calculation:	
Σ[(Date & Time of Legacy Response) – (Date & Time of Request to Legacy)] / (Number of Legacy Requests During the Reporting Period) X 100	
Report Structure:	
• CLEC Aggregate	
Data Retained Relating to CLEC Experience:	**Data Retained Relating to BST Performance:**
• Report Month • Response Interval • Regional Scope	
Retail Analog/Benchmark	
Benchmark	

PRE-ORDERING

Report/Measurement:	
OSS Interface Availability	
Definition:	
Percent of time OSS interface is functionally available compared to scheduled availability. Availability percentages for CLEC interface systems and for all Legacy systems accessed by them are captured	
Exclusions:	
None	
Business Rules:	
This measurement captures the availability percentages for the BST systems, which are used by CLECs during Pre-Ordering functions. Comparison to BST results allow conclusions as to whether an equal opportunity exists for the CLEC to deliver a comparable customer experience.	
Level of Disaggregation:	
• Region	
Calculation:	
(Functional Availability) / (Scheduled Availability) X 100	
Report Structure:	
• CLEC Aggregate • BST Aggregate	
Data Retained Relating to CLEC Experience	**Data Retained Relating to BST Experience**
• Report Month • Regional Scope	• Report Month • Regional Scope
Retail Analog/Benchmark:	
Retail Analog	

ORDERING

Report/Measurement:

Percent Flow Through Service Requests (Summary)

Definition:

The percentage of Local Service Requests (LSR) submitted electronically via the CLEC mechanized ordering process that flow through to SOCS without manual intervention

Exclusions:

- Fatal Rejects
- Auto Clarification
- Manual Fallout
- CLEC System Fallout
- Supplements (Subsequent versions) to cancel LSRs that are not LESOG eligible (under development)

Business Rules:

The CLEC mechanized ordering process includes all LSRs, including supplements which are submitted through one of the three gateway interfaces (TAG, EDI, and LENS), and flow through to SOCS without manual intervention. The CLEC mechanized ordering process does not include LSRs, which are, submitted manually (e.g., fax, and courier), or are not designed to flow through, i.e., Manual Fallout.

Definitions:

Fatal Rejects: Errors that prevent an LSR, submitted by the CLEC, from being processed further. When an LSR is submitted by a CLEC, LEO will perform edit checks to ensure the data received is correctly formatted and complete. For example, if the PON field contains an invalid character, LEO will reject the LSR and the CLEC will receive a Fatal Reject.

Auto-Clarification: errors that occur due to invalid data within the LSR. LESOG will perform data validity checks to ensure the data within the LSR is correct and valid. For example, if the address on the LSR is not valid according to RSAG, the CLEC will receive an Auto-Clarification.

Manual Fallout: errors that occur by design. Certain LSRs are designed to fallout of the Mechanized Order Process due to their complexity. These LSRs are manually processed by the LCSC. When a CLEC submits an LSR, LESOG will determine if the LSR should be forwarded to LCSC for manual handling. Following are the categories for Manual Fallout.

1. Complex services*
2. Expedites (requested by the CLEC)
3. Special pricing plans
4. Denials-restore and conversion, or disconnect and conversion orders
5. Partial migrations
6. Class of service invalid in certain states with some types of service
7. New telephone number not yet posted to BOCRIS
8. Low volume such as activity type "T" (move)
9. Pending order review required
10. More than 25 business lines
11. Restore or suspend for UNE combos
12. Transfer of calls option for the CLEC's end users
13. CSR inaccuracies such as invalid or missing CSR data in CRIS

* Attached is a list of services, including complex services, and whether LSRs issued for the services are eligible to flow through.

Total System Fallout: Errors that require manual review by the LCSC to determine if the error is caused by the CLEC, or is due to system functionality. If it is determined the error is caused by the CLEC, the LSR will be sent back to the CLEC as clarification. If it is determined the error is BST caused, the LCSC representative will correct the error.

ORDERING – (Percent Flow Through Service Requests (Summary) – Continued)

Calculation:	
Percent Flow Through = (The total number of LSRs that flow through LESOG to SOCS) / (the number of LSRs passed from LEO to LESOG) – Σ[(the number of LSRs that fall out for manual processing) + (the number of LSRs that are returned to the CLEC for clarification) + (the number of LSRs that contain errors made by CLECs)] X 100.	
Report Structure:	
• CLEC Aggregate	
Level of Disaggregation:	
• Region	
Data Retained Relating to CLEC Experience	**Data Retained Relating to BST Experience**
• Report month ➢ Total number of LSRs received • Total number of errors by type: ➢ Fatal rejects ➢ Total fallout for manual processing ➢ Auto clarification ➢ CLEC caused system fallout • Total number of errors by error code	
Retail Analog/Benchmark:	
Benchmark	

ORDERING

ATTACHMENT 2

Flowthrough – OSS99

BellSouth Flow-through Analysis
For CLECs LSRs placed via EDI or TAG

	BellSouth Service Offered to CLEC via resale or UNE	Flow-through if no BST or CLEC Errors (Yes/No)	Complex Service (Yes/No)	Complex Order (Yes/No)	Design Service (Yes/No)	Can ordering this service cause fall out for a reason other than errors or complex? If so, what reason?
1	Flat Rate/Residence	Yes	No	No	no	
2	Flat Rate/Business	Yes	No	No	no	
3	Pay Phone Provider	No	No	No	no	
4	Measured Rate/Res.	Yes	No	No	no	
5	Measured Rate/Bus.	Yes	No	No	no	
6	Area Plus	Yes	No	No	no	
7	Package/Complete Choice and area plus	Yes	No	No	no	
8	Optional Calling Plan	Yes	No	No	no	
9	Ga. Community Calling	Yes	No	No	no	
10	Call Waiting Deluxe	Yes	No	No	no	
11	Call Waiting	Yes	No	No	no	
12	Caller ID	Yes	No	No	no	
13	Speed Calling	Yes	No	No	no	
14	3 Way Calling	Yes	No	No	no	
15	Call Forwarding-Variable	Yes	No	No	no	
16	Remote Access to CF	Yes	No	No	no	
17	Enhanced Caller ID	Yes	No	No	no	
18	Memory Call	Yes	No	No	no	
19	Memory Call Ans. Svc.	Yes	No	No	no	
20	MTS	Yes	No	No	no	
21	RCF	Yes	No	No	no	
22	Ringmaster	Yes	No	No	no	
23	Call Tracing	Yes	No	No	no	
24	Call Block	Yes	No	No	no	
25	Repeat Dialing	Yes	No	No	no	
26	Call Selector	Yes	No	No	no	
27	Call Return	Yes	No	No	no	
28	Preferred Call Forward	Yes	No	No	no	
29	Touchtone	Yes	No	No	no	
30	Visual Director	Yes	No	No	no	
31	INP (all types?)	Yes	UNE	No	no	
32	Unbundled Loop-Analog 2W, SL1, SL2	Yes	UNE	No	Yes-designed, no-non-designed	
33	2 wire analog port	Yes	UNE	No	no	
34	Local Number Portability (always?)	Yes	UNE	No	no	
35	Accupulse	No	Yes	Yes	yes	See note at bottom of matrix.
36	Basic Rate ISDN	No*	Yes	Yes	yes	LSR electronically submitted; no flow through

	BellSouth Service Offered to CLEC via resale or UNE	Flow-through if no BST or CLEC Errors (Yes/No)	Complex Service (Yes/No)	Complex Order (Yes/No)	Design Service (Yes/No)	Can ordering this service cause fall out for a reason other than errors or complex? If so, what reason?
37	DID	No*	Yes	Yes	Yes	*LSR electronically submitted: no flow through.*
38	Frame Relay	No	Yes	Yes	yes	
39	Megalink	No	Yes	Yes	yes	
40	Megalink-T1	No	Yes	Yes	yes	
41	Native Mode LAN Interconnection (NMLI)	No	Yes	Yes	yes	
42	Pathlink Primary Rate ISDN	No	Yes	Yes	yes	
43	Synchronet	No	Yes	Yes	yes	LSR electronically submitted; no flow through
44	PBX Trunks	No	Yes	Yes	Yes	LSR electronically submitted; no flow through
45	LightGate	No	Yes	Yes	yes	
46	Smartpath	No	Yes	Yes	yes	
47*a*	Hunting *(Multiline)*	No*	Yes	no	no	LSR electronically submitted; no flow through
47b	*Hunting (Series Completion)*	**Yes**	**Yes**	**No**	**No**	
48	CENTREX	No	Yes	Yes	no	
49	FLEXSERV	No	Yes	Yes	yes	
50	Multiserv	No	Yes	Yes	yes	
51	Off-Prem Stations	No	Yes	Yes	yes	
52	SmartRING	No	Yes	Yes	yes	
53	FX	No	Yes	Yes	yes	
54	Tie Lines	No	Yes	Yes	Yes	
55	WATS	No	Yes	Yes	yes	
56	4 wire analog voice grade loop	No	UNE	Yes	yes-designed, no-non-designed	
57	*4 wire DS1 and DS0 digital loop*	No*	UNE	Yes	yes	*LSR electronically submitted: no flow through*
58	2 wire ISDN digital loop	No	UNE	Yes	yes	
59	4 wire DS1 & PRI digital loop	No	UNE	Yes	yes	
60	ADSL	**No**	UNE	Yes	yes	
61	HDSL	No	UNE	Yes	yes	
62	2 wire analog DID trunk port	No	UNE	Yes	Yes	

	BellSouth Service Offered to CLEC via resale or UNE	Flow-through if no BST or CLEC Errors (Yes/No)	Complex Service (Yes/No)	Complex Order (Yes/No)	Design Service (Yes/No)	Can ordering this service cause fall out for a reason other than errors or complex? If so, what reason?
63	2 wire ISDN digital line side port	No	UNE	Yes	yes	
64	4 wire ISDN DSI digital trunk ports	No	UNE	Yes	yes	
65	UNE Combinations	y-loop+port	UNE	Yes	yes	
66	Directory Listings (simple)	Yes	UNE	Yes	no	
	BellSouth Service Offered to CLEC via resale or UNE	Flow-through if no BST or CLEC Errors (Yes/No)	Complex Service (Yes/No)	Complex Order (Yes/No)	Design Service (Yes/No)	Can ordering this service cause fall out for a reason other than errors or complex? If so, what reason?
67	Directory Listings (complex)	No*	UNE	yes	no	*LSR submitted electronically; no flow through*
68	ESSX	No	Yes	Yes	no	

Note for last column: For all services that indicate 'No' for flow-through, the following reasons, in addition to errors or complex services, also prompt manual handling: Expedites from CLECs, special pricing plans, for denials – restore and conversion or disconnect and conversion both required, partial migrations (although conversions-as-is flow through), class of service invalid in certain states with some TOS – e.g. gov't, or cannot be changed when changing main TN on C activity, low volume – e.g. activity type T=move, pending order review required, more than 25 business lines. restore or suspend for UNE combos, transfer of calls option for CLEC end user – fixed with release 6.0, new TN not yet posted to BOCRIS. All but the last one are unique to the CLEC environment.

ORDERING

Report/Measurement:	
Reject Interval	
Definition:	
Reject Interval is the average reject time from receipt of an LSR to the distribution of a Reject. An LSR is considered valid when it is electronically submitted by the CLEC and passes LEO edit checks to insure the data received is correctly formatted and complete.	
Exclusions:	
Service Requests canceled by CLEC	
Business Rules:	
Fully Mechanized: The elapsed time from receipt of a valid LSR (date and time stamp in EDI, TAG) until the LSR is rejected (date and time stamp of reject in LEO). Fatal Rejects and Auto Clarifications are considered in the Fully Mechanized category.	
Calculation:	
Reject Interval = Σ[(Date and Time of Service Request Rejection) – (Date and Time of Service Request Receipt)] / (Number of Service Requests Rejected in Reporting Period)	
Report Structure:	
• CLEC Specific • CLEC Aggregate	
Level of Disaggregation:	
• State	
Data Retained Relating to CLEC Experience:	**Data Retained Relating to BST Performance:**
• Report Month • Reject Interval • Total Number of LSRs • Total number of Errors • State and Region	
Retail Analog/Benchmark:	
Benchmark	

ORDERING

Report/Measurement:	
Firm Order Confirmation Timeliness	
Definition:	
Interval for Return of a Firm Order Confirmation (FOC Interval) is the average response time from receipt of valid LSR to distribution of a firm order confirmation.	
Exclusions:	
• Rejected LSRs • Partially Mechanized or Non-Mechanized LSRs received and/or FOCd outside of normal business hours.	
Business Rules:	
• **Mechanized** - The elapsed time from receipt of a valid LSR (date and time stamp in LENS, EDI, TAG) until the LSR is processed and appropriate service orders are generated in SOCS.	
Calculation:	
Firm Order Confirmation Timeliness = Σ[(Date and Time of Firm Order Confirmation) – (Date and Time of Service Request Receipt)] / (Number of Service Requests Confirmed in Reporting Period)	
Report Structure:	
• CLEC Specific • CLEC Aggregate	
Level of Disaggregation:	
• State	
Data Retained Relating to CLEC Experience:	**Data Retained Relating to BST Performance:**
• Report Month • Interval for FOC • Total number of LSRs • State and Region	•
Retail Analog/Benchmark:	
Benchmark	

PROVISIONING

Report/Measurement:
Percent Missed Installation Appointments
Definition:
"Percent missed installation appointments" monitors the reliability of BST commitments with respect to committed due dates to assure that CLECs can reliably quote expected due dates to their retail customer as compared to BST.
Exclusions:
• Canceled Service Orders • Order Activities of BST or the CLEC associated with internal or administrative use of local services (Record Orders, Test Orders, etc.) • Disconnect (D) & From (F) orders
Business Rules:
Percent Missed Installation Appointments (MA) is the percentage of total orders processed for which BST is unable to complete the service orders on the committed due dates. Missed Appointments caused by end-user reasons will be included and reported separately. A business day is any time period within the same date frame, which means there cannot be a cutoff time for commitments as certain types of orders are, requested to be worked after standard business hours. Also, during Daylight Savings Time, field technicians are scheduled until 9PM in some areas and the customer is offered a greater range of intervals from which to select.
Calculation:
Percent Missed Installation Appointments = (Number of Orders Not Complete by Committed Due Date in Reporting Period) / (Number of Orders Completed in Reporting Period) X 100
Report Structure:
• CLEC Specific • CLEC Aggregate • BST Aggregate **Report explanation:** The difference between End User MA and Total MA is the result of BST caused misses. Here, Total MA is the total % of orders missed either by BST or CLEC end user and End User MA represents the percentage of orders missed by the end user
Level of Disaggregation:
• Product Reporting Levels ➢ Resale POTS ➢ Resale Design ➢ UNE Loop & Port Combination ➢ UNE Loops • Geographic Scope ➢ State

PROVISIONING (Percent Missed Installation Appointments – Continued)

Data Retained Relating to CLEC Experience	Data Retained Relating to BST Experience
• Report Month • CLEC Order Number and PON (PON) • Committed Due Date (DD) • Completion Date (CMPLTN DD) • Status Type • Status Notice Date • Standard Order Activity • Geographic Scope **NOTE:** Code in parentheses is the corresponding header found in the raw data file.	• Report Month • BST Order Number • Committed Due Date • Completion Date • Status Type • Status Notice Date • Standard Order Activity • Geographic Scope
Retail Analog/Benchmark:	
CLEC Resale POTS / BST Retail POTS CLEC Resale Design / BST Retail Design CLEC UNE Loop & Port Combination - Retail Analog CLEC UNE Loops – Benchmark	

PROVISIONING

Report/Measurement :

Order Completion Interval (OCI) & Order Completion Interval Distribution

Definition:

The "order completion interval" measure monitors the average time it takes BST to provide service for the CLEC or its' own customers. The "Order Completion Interval Distribution" provides the percentage of orders completed within certain time periods.

Exclusions:

- Canceled Service Orders
- Order Activities of BST or the CLEC associated with internal or administrative use of local services
- (Record Orders, Test Orders, etc.)
- D (Disconnect) and F (From) orders. (From is the disconnect side of a move order when the customer moves to a new address).
- "L" Appointment coded orders (where the customer has requested a later than offered interval)

Business Rules:

The actual completion interval is determined for each order processed during the reporting period. The completion interval is the elapsed time from when the order is electronically entered into SOCS after the FOC on a CLEC order, or the date time stamp receipt into SOCS by BST on retail orders to the order completion date. The clock starts when a valid order number is assigned by SOCS and stops when the technician or system completes the order in SOCS. Elapsed time for each order is accumulated for each reporting dimension. The accumulated time for each reporting dimension is then divided by the associated total number of orders completed

Calculation:

Average Completion Interval:

Σ [(Completion Date & Time) - (Order Issue Date & Time)] / (Count of Orders Completed in Reporting Period)

Order Completion Interval Distribution:

Σ (Service Orders Completed within "X" days) / (Total Service Orders Completed in Reporting Period) X 100

Report Structure:

- CLEC Specific
- CLEC Aggregate
- BST Aggregate

PROVISIONING –
(Average Completion Interval (OCI) & Order Completion Interval Distribution – Continued)

<table>
<tr><td colspan="2">Level of Disaggregation:</td></tr>
<tr><td colspan="2">• Product Reporting Levels
➢ Resale POTS (Dispatch)
➢ Resale Design (No Dispatch)
➢ UNE Loop & Port Combination (Dispatch)
➢ UNE Loops (Dispatch – W Coded Orders Only)
➢ IC Trunks (Dispatch)
• Geographic Scope
➢ State
A W-code indicates orders where the CLEC accepts the offered interval</td></tr>
<tr><td>Data Retained Relating to CLEC Experience</td><td>Data Retained Relating to BST Experience</td></tr>
<tr><td>• Report Month
• CLEC Company Name
• Order Number (PON)
• Submission Date & Time (TICKET_ID)
• Completion Date (CMPLTN_DT)
• Service Type (CLASS_SVC_DESC)
• Geographic Scope

NOTE: Code in parentheses is the corresponding header found in the raw data file.</td><td>• Report Month
• BST Order Number
• Order Submission Date & Time
• Order Completion Date & Time
• Service Type
• Geographic Scope</td></tr>
<tr><td colspan="2">Retail Analog/Benchmark</td></tr>
<tr><td colspan="2">CLEC Resale POTS / BST Retail POTS
CLEC Resale Design / BST Retail Design
CLEC UNE Loop & Port Combination - Retail Analog
CLEC UNE Loops – Benchmark
CLEC IC Trunks – Retail Analog</td></tr>
</table>

PROVISIONING

Report/Measurement:

Coordinated Customer Conversions

Definition:

This category measures the average time it takes BST to disconnect an unbundled loop from the BST switch and cross connect it to a CLEC's equipment. This measurement applies to service orders with and without INP, and where the CLEC has requested BST to provide a coordinated cutover.

Exclusions:

- Any order canceled by the CLEC will be excluded from this measurement.
- Delays due to CLEC following disconnection of the unbundled loop
- Unbundled Loops where there is no existing subscriber loop

Business Rules:

Where the service order includes INP, the interval includes the total time for the cutover including the translation time to place the line back in service on the ported line. The interval is calculated for the entire cutover time for the service order and then divided by items worked in that time to give the average per item interval for each service order.

Calculation:

Σ [(Completion Date and Time for Cross Connection of an Unbundled Loop)- (Disconnection Date and Time of an Unbundled Loop)] / Total Number of Unbundled Loop Items for the reporting period.

Report Structure:

- CLEC Specific
- CLEC Aggregate

Level of Disaggregation:

- Product Reporting Levels
  - UNE Loops without INP
  - UNE Loops with INP
- Geographic Scope
  - State

Data Retained Relating to CLEC Experience	Data Retained Relating to BST Experience
• Report Month • CLEC Order Number • Committed Due Date (DD) • Service Type (CLASS_SVC_DESC) • Cutover Start Time • Cutover Completion time • Portability start and completion times (INP Orders) • Total Items **NOTE:** Code in parentheses is the corresponding header found in the raw data file.	• No BST Analog Exists

Retail Analog/Benchmark:

Benchmark

PROVISIONING

Report/Measurement:

% Provisioning Troubles within 4 days of Service Order Activity

Definition:

Percent Provisioning Troubles within 4 days of Installation measures the quality and accuracy of installation activities.

Exclusions:

- Canceled Service Orders
- Order Activities of BST or the CLEC associated with internal or administrative use of local services (R Orders, Test Orders, etc.)
- Disconnect & From orders

Business Rules:

Measures the quality and accuracy of completed orders. The first trouble report from a service order after completion is counted in this measure. Subsequent trouble reports are measured in Repeat Report Rate. Reports are calculated by searching in the prior report period for completed service orders and following 4 days after completion for a trouble report.
Disconnect & From orders are excluded as there is no subsequent activity following a disconnect.

Calculation:

% Provisioning Troubles within 4 days of Service Order Activity = Σ (Trouble reports on all completed orders ≤ 4 days following service order(s) completion) / (All Service Orders completed in the report calendar month) X 100

Report Structure:

- CLEC Specific
- CLEC Aggregate
- BST Aggregate

Level of Disaggregation:

- Product Reporting Levels
  - ➢ Resale POTS
  - ➢ Resale Design
  - ➢ UNE Loop & Port Combination
  - ➢ UNE Loops
- Geographic Scope
  - ➢ State

Data Retained Relating to CLEC Experience	Data Retained Relating to BST Experience
• Report Month • CLEC Order Number and PON • Order Submission Date(TICKET_ID) • Order Submission Time (TICKET_ID) • Status Type • Status Notice Date • Standard Order Activity • Geographic Scope **NOTE:** Code in parentheses is the corresponding header found in the raw data file.	• Report Month • BST Order Number • Order Submission Date • Order Submission Time • Status Type • Status Notice Date • Standard Order Activity • Geographic Scope

Retail Analog/Benchmark:

CLEC Resale POTS / BST Retail POTS
CLEC Resale Design / BST Retail Design
CLEC UNE Loop & Port Combination - Retail Analog
CLEC UNE Loops - Benchmark

MAINTENANCE & REPAIR

Report/Measurement:

Missed Repair Appointments

Definition:

The percent of trouble reports not cleared by the committed date and time.

Exclusions:

- Trouble tickets canceled at the CLEC request.
- BST trouble reports associated with internal or administrative service.
- Customer Provided Equipment (CPE) troubles or CLEC Equipment Trouble.

Business Rules:

The negotiated commitment date and time is established when the repair report is received. The cleared time is the date and time that BST personnel clear the trouble and closes the trouble report in his/her Computer Access Terminal (CAT) or workstation. If this is after the Commitment time, the report is flagged as a "Missed Commitment" or a missed repair appointment. When the data for this measure is collected for BST and a CLEC, it can be used to compare the percentage of the time repair appointments are missed due to BST reasons. Note: Appointment intervals vary with force availability in the POTS environment. Specials and Trunk intervals are standard interval appointments of no greater than 24 hours.

Calculation:

Percentage of Missed Repair Appointments =Σ (Count of Customer Troubles Not Cleared by the Quoted Commitment Date and Time) / Σ (Total Trouble reports closed in Reporting Period) X 100

Report Structure:

- CLEC Specific
- CLEC Aggregate
- BST Aggregate

Level of Disaggregation:

- Product Reporting Levels
  - Resale POTS
  - Resale DESIGN
  - UNE Loop & Port Combination
  - UNE Loops
- Geographic Scope
  - State

Data Retained Relating to CLEC Experience	Data Retained Relating to BST Experience
• Report Month • CLEC Company Name • Submission Date & Time (TICKET_ID) • Completion Date (CMPLTN_DT) • Service Type (CLASS_SVC_DESC) • Disposition and Cause (CAUSE_CD & CAUSE_DESC) • Geographic Scope **NOTE:** Code in parentheses is the corresponding header found in the raw data file.	• Report Month • BST Company Code • Submission Date & Time • Completion Date • Service Type • Disposition and Cause (Non-Design / Non-Special Only) • Trouble Code (Design and Trunking Services) • Geographic Scope

Retail Analog/Benchmark

CLEC Resale POTS / BST Retail POTS
CLEC Resale Design / BST Retail Design
CLEC UNE Loop & Port Combination - Retail Analogue
CLEC UNE Loops – Benchmark

MAINTENANCE & REPAIR

Report/Measurement:

Customer Trouble Report Rate

Definition:

Initial and repeated customer direct or referred troubles reported within a calendar month per 100 lines/ circuits in service.

Exclusions:

- Trouble tickets canceled at the CLEC request.
- BST trouble reports associated with administrative service.
- Customer provided Equipment (CPE) troubles or CLEC equipment troubles.

Business Rules:

Customer Trouble Report Rate is computed by accumulating the number of maintenance, initial and repeated, trouble reports during the reporting period. The resulting number of trouble reports are divided by the total "number of service" lines, ports or combination of existing for the CLEC(s) and BST respectively at the end of the report month.

Calculation:

Customer Trouble Report Rate = (Total Count of Initial and Repeated Trouble Reports in the Current Period) / (Total Number of Service Access Lines in service at End of the Report Period) X 100

Report Structure:

- CLEC Specific
- CLEC Aggregate
- BST Aggregate.

Level of Disaggregation:

- Product Reporting Levels
  - Resale POTS
  - Resale DESIGN
  - UNE Loop & Port Combination (This can not be captured for Customer Trouble Report Rate)
  - UNE Loops
- Geographic Scope
  - State

Data Retained Relating to CLEC Experience	Data Retained Relating to BST Experience
• Report Month • CLEC Company Name • Ticket Submission Date & Time (TICKET_ID) • Ticket Completion Date (CMPLTN_DT) • Service Type (CLASS_SVC_DESC) • Disposition and Cause (CAUSE_CD & CAUSE_DESC) • # Service Access Lines in Service at the end of period • Geographic Scope **NOTE:** Code in parentheses is the corresponding header found in the raw data file.	• Report Month • BST Company Code • Ticket Submission Date & Time • Ticket Completion Date • Service Type • Disposition and Cause (Non-Design / Non-Special Only) • Trouble Code (Design and Trunking Services) • # Service Access Lines in Service at the end of period • Geographic Scope

Retail Analog/Benchmark:

CLEC Resale POTS / BST Retail POTS
CLEC Resale Design / BST Retail Design
CLEC UNE Loop & Port Combination - Retail Analogue
CLEC UNE Loops - Benchmark

MAINTENANCE & REPAIR

Report/Measurement:

Maintenance Average Duration

Definition:

The Average duration of Customer Trouble Reports from the receipt of the Customer Trouble Report to the time the trouble report is cleared.

Exclusions:

- Trouble reports canceled at the CLEC request
- BST trouble reports associated with administrative service
- Customer Provided Equipment (CPE) troubles or CLEC Equipment Troubles.
- Trouble reports greater than 10 days

Business Rules:

For Average Duration the clock starts on the date and time of the receipt of a correct repair request. The clock stops on the date and time the service is restored (when the technician completes the trouble ticket on his/her CAT or work system).

Calculation:

Maintenance Average Duration = Σ[(Date and Time of Service Restoration) – (Date and Time Trouble Ticket was Opened)] / (Total Closed Troubles in the reporting period)

Report Structure:

- CLEC Specific
- BST Aggregate
- CLEC Aggregate

Level of Disaggregation:

- Product Reporting Levels
  - Resale POTS
  - Resale DESIGN
  - UNE Loop & Port Combination
  - UNE Loops
  - IC Trunks
- Geographic Scope
  - State

Data Retained Relating to CLEC Experience	Data Retained Relating to BST Experience
• Report Month • Total Tickets (LINE_NBR) • CLEC Company Name • Ticket Submission Date & Time (TIME_ID) • Ticket Completion Date (CMPLTN_DT • Service Type (CLASS_SVC_DESC) • Disposition and Cause (CAUSE_CD & CAUSE_DESC) • Geographic Scope **NOTE:** Code in parentheses is the corresponding header found in the raw data file.	• Report Month • Total Tickets • BST Company Code • Ticket Submission Date • Ticket submission Time • Ticket completion Date • Ticket Completion Time • Total Duration Time • Service Type • Disposition and Cause (Non – Design / Non-Special Only) • Trouble Code (Design and Trunking Services) • Geographic Scope

Retail Analog/Benchmark:

CLEC Resale POTS / BST Retail POTS
CLEC Resale Design / BST Retail Design
CLEC UNE Loop & Port Combination - Retail Analog
CLEC UNEs – Benchmark
IC Trunks – Retail Analog

MAINTENANCE & REPAIR

Report/Measurement:

Percent Repeat Troubles within 30 Days

Definition:

Trouble reports on the same line/circuit as a previous trouble report received within 30 calendar days as a percent of total troubles reported.

Exclusions:

- Trouble Reports canceled at the CLEC request
- BST Trouble Reports associated with administrative service
- Customer Provided Equipment (CPE) Troubles or CLEC Equipment Troubles.

Business Rules:

Includes Customer trouble reports received within 30 days of an original Customer trouble report.

Calculation:

Percentage of Missed Repair Appointments = (Count of Customer Troubles where more than one trouble report was logged for the same service line within a continuous 30 days) / (Total Trouble Reports Closed in Reporting Period) X 100

Report Structure:

- CLEC Specific
- CLEC Aggregate
- BST Aggregate

Level of Disaggregation:

- Product Reporting Levels
  - Resale POTS
  - Resale DESIGN
  - UNE Loop & Port Combination
  - UNE Loops
- Geographic Scope
  - State

Data Retained Relating to CLEC Experience	Data Retained Relating to BST Experience
• Report Month • Total Tickets (LINE_NBR) • CLEC Company Name • Ticket Submission Date & Time (TICKET_ID) • Ticket Completion Date (CMPLTN_DT) • Total and Percent Repeat Trouble Reports within 30 Days (TOT_REPEAT) • Service Type • Disposition and Cause (CAUSE_CD & CAUSE_DESC) • Geographic Scope **NOTE:** Code parentheses is the corresponding header format found in the raw data file.	• Report Month • Total Tickets • BST Company Code • Ticket Submission Date • Ticket Submission Time • Ticket Completion Date • Ticket Completion Time • Total and Percent Repeat Trouble Reports within 30 days • Service Type • Disposition and Cause (Non – Design/ Non-Special only) • Trouble Code (Design and Trunking Services) • Geographic Scope

Retail Analog/Benchmark:

CLEC Resale POTS / BST Retail POTS
CLEC Resale Design / BST Retail Design
CLEC UNE Loop & Port Combination - Retail Analogue
CLEC UNEs – Benchmark

BILLING

Report/Measurement:	
Invoice Accuracy	
Definition:	
This measure provides the percentage of accuracy of the billing invoices rendered to CLECs during the current month.	
Exclusions:	
• Adjustments not related to billing errors (e.g., credits for service outage, special promotion credits, adjustments to satisfy the customer)	
Business Rules:	
The accuracy of billing invoices delivered by BST to the CLEC must enable them to provide a degree of billing accuracy comparative to BST bills rendered to retail customers. The BellSouth Billing verification process includes manually analyzing a sample of local bills from each bill period. The bill verification process draws from a mix of different customer billing options and types of service. An end-to-end auditing process is performed for new products and services. Internal measurements and controls are maintained on all billing processes.	
Calculation:	
Invoice Accuracy = (Total Billed Revenues during current month) – (Billing Related Adjustments during current month) / Total Billed Revenues during current month X 100	
Report Structure:	
• CLEC Specific • CLEC Aggregate • BST Aggregate	
Level of Disaggregation :	
• Geographic Scope ➢ Region	
Data Retained Relating to CLEC Experience:	**Data Retained Relating to BST Performance:**
• Report Month • Invoice Type • Total Billed Revenue • Billing Related Adjustments	• Report Month • Retail Type ➢ CRIS ➢ CABS • Total Billed Revenue • Billing Related Adjustments
Retail Analog/Benchmark	
Retail Analog	

Revision date: 08/02/99 (lg)

BILLING

Report/Measurement:	
Mean Time to Deliver Invoices	
Definition:	
This measure provides the mean interval for the delivery of billing invoices	
Exclusions:	
Any invoices rejected due to formatting or content errors.	
Business Rules:	
Measures the mean interval for timeliness of billing records delivered to CLECs in an agreed upon format. CRIS-based invoices are measured in business days, and CABS-based invoices in calendar days.	
Calculation:	
Mean Time To Deliver Invoices = Σ [(Invoice Transmission Date)– (Close Date of Scheduled Bill Cycle)] / (Count of Invoices Transmitted in Reporting Period)	
Report Structure:	
• CLEC Specific • CLEC Aggregate • BST Aggregate	
Level of Disaggregation:	
• Geographic Scope ➢ Region	
Data Retained Relating to CLEC Experience:	**Data Retained Relating to BST Performance:**
• Report Month • Invoice Type • Invoice Transmission Count • Date of Scheduled Bill Close	• Report Month • Retail Type ➢ CRIS ➢ CABS • Invoice Transmission Count • Date of Scheduled Bill Close
Retail Analog/Benchmark:	
Retail Analog	

BILLING

Report/Measurement:	
Usage Data Delivery Accuracy	
Definition:	
This measurement captures the percentage of recorded usage that is delivered error free and in an acceptable format to the appropriate CLEC. These percentages will provide the necessary data for use as a comparative measurement for BellSouth performance. This measurement captures Data Delivery Accuracy rather than the accuracy of the individual usage recording.	
Exclusions:	
None	
Business Rules:	
The accuracy of the data delivery of usage records delivered by BST to the CLEC must enable them to provide a degree of accuracy comparative to BST bills rendered to their retail customers. If errors are detected in the delivery process, they are investigated, evaluated and documented. Errors are corrected and the data retransmitted to the CLEC.	
Calculations:	
Usage Data Delivery Accuracy = Σ [(Total number of usage data packs sent during current month) – (Total number of usage data packs requiring retransmission during current month)] / (Total number of usage data packs sent during current month) X 100	
Report Structure:	
• CLEC Specific • CLEC Aggregate • BST Aggregate	
Level of Disaggregation:	
• Geographic Scope ➢ Region	
Data Retained Relating to CLEC Experience:	**Data Retained Relating to BST Performance:**
• Report Month • Record Type ➢ BellSouth Recorded ➢ Non BellSouth Recorded	• Report Month • Record Type
Retail Analog/Benchmark:	
Retail Analog	

BILLING

Report/Measurement:	
Usage Data Delivery Timeliness	
Definition:	
This measurement provides a percentage of recorded usage data (usage recorded by BST and usage recorded by other companies and sent to BST for billing) that is delivered to the appropriate CLEC within six (6) calendar days from the receipt of the initial recording. A comparative measure is also provided showing timeliness of BST messages processed and transmitted via CMDS. Timeliness, Completeness and Mean Time to Deliver Usage measures are reported on the same report.	
Exclusions:	
None	
Business Rules:	
The purpose of this measurement is to demonstrate the level of timeliness for processing and transmission of usage data delivered to the appropriate CLEC. The usage data will be mechanically transmitted or mailed to the CLEC data processing center once daily. The Timeliness interval of usage recorded by other companies is measured from the date BST receives the records to the date BST distributes to the CLEC. Method of delivery is at the option of the CLEC.	
Calculation:	
Usage Data Delivery Timeliness = (Total number of usage records sent within six (6) calendar days from initial recording/receipt) / (Total number of usage records sent) X 100	
Report Structure:	
• CLEC Aggregate • CLEC Specific • BST Aggregate	
Level of Disaggregation:	
• Geographic Scope ➢ Region	
Data Retained Relating to CLEC Experience:	**Data Retained Relating to BST Performance:**
• Report Month • Record Type ➢ BellSouth Recorded ➢ Non-BellSouth Recorded	• Report Monthly • Record Type
Retail Analog/Benchmark:	
Retail Analog	

TRUNK GROUP PERFORMANCE

Report/Measurement:

Trunk Group Service Report

Definition:

A report of the percent blocking above the Measured Blocking Threshold (MBT) on all final trunk groups between CLEC Points of Termination and BST end offices or tandems.

Exclusions:

- Trunk groups for which valid traffic data is not available
- High use trunk groups

Business Rules:

Traffic trunking data measurements are validated and processed by the Total Network Data System/Trunking (TNDS/TK), a Telcordia (BellCore) supported application, on an hourly basis for Average Business Days (Monday through Friday). The traffic load sets, including offered load and observed blocking ratio (calls blocked divided by calls attempted), are averaged for a 20 day period, and the busy hour is selected. The busy hour average data for each trunk group is captured for reporting purposes. Although all trunk groups are available for reporting, the report highlight those trunk groups with blocking greater than the Measured Blocking Threshold (MBT) and the number of consecutive monthly reports that the trunk group blocking has exceeded the MBT. The MBT for CTTG is 2% and the MBT for all other trunk groups is 3%.

Calculation:

Measured blocking = (Total number of blocked calls) / (Total number of attempted calls) X 100

Report Structure:

- BST Aggregate
  - CTTG
  - Local
- CLEC Aggregate
  - BST Administered CLEC Trunk
  - CLEC Administered CLEC Trunk
- CLEC Specific
  - BST Administered CLEC Trunk
  - CLEC Administered CLEC Trunk

Level of Disaggregation:

State

Data Retained Relating to CLEC Experience	Data Retained Relating to BST Experience
• Report month • Total trunk groups • Total trunk groups for which data is available • Trunk groups with blocking greater than the MBT • Percent of trunk groups with blocking greater than the MBT	• Report month • Total trunk groups • Total trunk groups for which data is available • Trunk groups with blocking greater than the MBT • Percent of trunk groups with blocking greater than the MBT

Retail Analog/Benchmark:

BST Analog

TRUNK GROUP PERFORMANCE

Report/Measurement:

Trunk Group Service Detail

Definition:

A detailed list of all final trunk groups between CLEC Points of Presence and BST end offices or tandems, and the actual blocking performance when the blocking exceeds the Measured Blocking Threshold (MBT) for the trunk groups.

Exclusions:

- Trunk groups for which valid traffic data is not available
- High use trunk groups

Business Rules:

Traffic trunking data measurements are validated and processed by the Total Network Data System/Trunking (TNDS/TK), a Telcordia (Bellcore) supported application, on an hourly basis for Average Business Days (Monday through Friday). The traffic load sets, including offered load and observed blocking ratio (calls blocked divided by calls attempted), are averaged for a 20 day period, and the busy hour is selected. The busy hour average data for each trunk group is captured for reporting purposes. Although all trunk groups are available for reporting, the report highlight those trunk groups with blocking greater than the Measured Blocking Threshold (MBT) and the number of consecutive monthly reports that the trunk group blocking has exceeded the MBT. The MBT for CTTG is 2% and the MBT for all other trunk groups is 3%.

Calculation:

Measured Blocking = (Total number of blocked calls) / (Total number of attempted calls) X 100

Report Structure:

• BST Specific ➢ Traffic Identity ➢ TGSN ➢ Tandem ➢ End Office ➢ Description ➢ Observed Blocking ➢ Busy Hour ➢ Number Trunks ➢ Valid study days ➢ Number reports ➢ Remarks	• CLEC Specific ➢ Traffic Identity ➢ TGSN ➢ Tandem ➢ CLEC POT ➢ Description ➢ Observed Blocking ➢ Busy Hour ➢ Number Trunks ➢ Valid study days ➢ Number reports ➢ Remarks

Level of Disaggregation:

State

Data Retained Relating to CLEC Experience	Data Retained Relating to BST Experience
• Report month • Total trunk groups • Total trunk groups for which data is available • Trunk groups with blocking greater than the MBT • Percent of trunk groups with blocking greater than the MBT • Traffic identity, TGSN, end points, description, busy hour, valid study days, number reports	• Report month • Total trunk groups • Total trunk groups for which data is available • Trunk groups with blocking greater than the MBT • Percent of trunk groups with blocking greater than the MBT • Traffic identity, TGSN, end points, description, busy hour, valid study days, number reports

Retail Analog/Benchmark:

Retail Analog

LNP

Report/Measurement :
Average Disconnect Timeliness Interval & Disconnect Timeliness Interval Distribution
Definition:
Disconnect Timeliness is defined as the interval between the time the LNP Gateway receives the 'Number Ported' message from NPAC (signifying the CLEC 'Activate') until the time that the Disconnect service order for an LSR is completed in SOCS. This interval effectively measures BST responsiveness by isolating it from impacts that are caused by CLEC related activities.
Exclusions:
• Canceled Service Orders • Order Activities of BST or the CLEC associated with internal or administrative use of local services (Record Orders, Test Orders, etc.) where identifiable. • "L" Appointment code orders (indicating the customer has requested a later than offered interval)
Business Rules:
The Disconnect Timeliness interval is determined for the last Disconnect service order processed on an LSR during the reporting period. The Disconnect Timeliness interval is the elapsed time from when BST receives the last 'Number Ported' message for an LSR from NPAC (signifying the CLEC 'Activate') until the last Disconnect service order is completed in SOCS. Elapsed time for each order is accumulated for each reporting dimension. The accumulated time for each reporting dimension is then divided by the total number of selected disconnect orders which have been completed.
Calculation :
Average Disconnect Timeliness Interval: Σ [(Disconnect Service Order Completion Date & Time) - ('Number Ported' Message Received Date & Time)] / Σ (Total Number of Disconnect Service Orders Completed in Reporting Period) **Disconnect Timeliness Interval Distribution:** [Σ (Disconnect Service Orders Completed in "X" days) / (Total Disonnect Service Orders Completed in Reporting Period)] X 100
Report Structure:
• Mechanized (service orders generated by LSRs submitted via EDI or TAG) • CLEC Specific • CLEC Aggregate
Level of Disaggregation:
• Product Reporting Levels ➢ LNP • Geographic Scope ➢ State

LNP

Report/Measurement:
Percent Missed Installation Appointments
Definition:
Percent Missed Installation Appointments monitors the reliability of BST commitments with respect to committed due dates to assure that CLECs can reliably quote expected due dates to their retail customer as compared to BST.
Exclusions:
• Canceled Service Orders • Order Activities of BST or the CLEC associated with internal or administrative use of local services (Record Orders, Test Orders, etc.) where identifiable.
Business Rules:
Percent Missed Installation Appointments (PMI) is the percentage of total orders processed for which BST is unable to complete the service order on the committed due date. Missed Appointments caused by end-user reasons will be included and reported in a separate category. A business day is any time period within the same date frame, which means there cannot be a cutoff time for commitments as certain types of orders are requested to be worked after standard business hours. Also, during Daylight Savings Time, field technicians are scheduled until 9PM in some areas and the customer is offered a greater range of intervals from which to select.
Calculation:
Percent Missed Installation Appointments: [Σ (Number of Orders Not Completed by Committed Due Date in Reporting Period) / (Number of Orders Completed in Reporting Period)] X 100
Report Structure:
• Mechanized (service orders generated by LSRs submitted via EDI or TAG) • CLEC Specific • CLEC Aggregate **Report explanation:** Total Missed Appointments is the total % of orders missed either by BST or the CLEC end user. End User MA represents the percentage of orders missed by the CLEC end user. The difference between End User Missed Appointments and Total Missed Appointments is the number of BST caused misses.
Level of Disaggregation:
• Product Reporting Levels ➢ LNP • Geographic Scope ➢ State

COLLOCATION

Report/Measurement:
Collocation/Percent of Due Dates Missed
Definition:
Measures the percent of missed due dates for collocation arrangements.
Exclusions:
• Any Bona Fide firm order cancelled by the CLEC • Bona Fide firm orders to augment previously completed arrangements • Time for BST to obtain permits • Time during which the collocation contract is being negotiated
Business Rules:
The clock starts on the date that BST receives a complete and accurate Bona Fide firm order accompanied by the appropriate fee. The clock stops on the date that BST completes the collocation arrangement.
Calculation:
% of Due Dates Missed = Σ (Number of Orders not completed by the BST Committed Due Date during Reporting Period) / Number of Orders Completed in Reporting Period) X 100
Report Structure:
• Individual CLEC aggregate • Aggregate of all CLECs
Level of Disaggregation:
• State • Physical
Data Retained:
• Report period • Aggregate data
Retail Analog/Benchmark:
Benchmark

VSEEMIII TIER-1 SUBMETRICS

- FOC Timeliness (Mechanized only)
- Average Reject Interval (Mechanized only)
- Order Completion Interval (Dispatch only) – Resale POTS
- Order Completion Interval (Dispatch only) – Resale Design
- Order Completion Interval (No Dispatch only) – UNE Loop and Port Combos
- Order Completion Interval ('w' code orders, Dispatch only) – UNE Loops
- Order Completion Interval (Dispatch only) – IC Trunks
- Percent Missed Installation Appointments – Resale POTS
- Percent Missed Installation Appointments – Resale Design
- Percent Missed Installation Appointments – UNE Loop and Port Combos
- Percent Missed Installation Appointments – UNE Loops
- Percent Provisioning Troubles within 4 Days - Resale POTS
- Percent Provisioning Troubles within 4 Days - Resale Design
- Percent Provisioning Troubles within 4 Days - UNE Loop and Port Combos
- Percent Provisioning Troubles within 4 Days - UNE Loops
- Customer Trouble Report Rate – Resale POTS
- Customer Trouble Report Rate – Resale Design
- Customer Trouble Report Rate - UNE Loop and Port Combos
- Customer Trouble Report Rate - UNE Loops
- Percent Missed Repair Appointments – Resale POTS
- Percent Missed Repair Appointments - Resale Design
- Percent Missed Repair Appointments - UNE Loop and Port Combos
- Percent Missed Repair Appointments - UNE Loops
- Maintenance Average Duration – Resale POTS
- Maintenance Average Duration – Resale Design
- Maintenance Average Duration - UNE Loop and Port Combos
- Maintenance Average Duration - UNE Loops
- Maintenance Average Duration – IC Trunks
- Percent Repeat Troubles within 30 Days – Resale POTS
- Percent Repeat Troubles within 30 Days – Resale Design
- Percent Repeat Troubles within 30 Days - UNE Loop and Port Combos
- Percent Repeat Troubles within 30 Days - UNE Loops
- Percent Trunk Blockage
- LNP Disconnect Timeliness
- LNP Percent Missed Installation Appointment
- Coordinated Customer Conversions for UNE Loops
- Coordinated Customer Conversions for LNP
- Percent Missed Collocation Due Dates

VSEEMIII TIER-2 SUBMETRICS

- Percent Response Received within "X" seconds – Pre-Order OSS
- OSS Interface Availability
- Order Process Percent Flow-Through (Mechanized only)
- Order Completion Interval (Dispatch only) – Resale POTS
- Order Completion Interval (Dispatch only) – Resale Design
- Order Completion Interval (No Dispatch only) – UNE Loop and Port Combos
- Order Completion Interval ('w' code orders, Dispatch only) – UNE Loops
- Order Completion Interval (Dispatch only) – IC Trunks
- Percent Missed Installation Appointments – Resale POTS
- Percent Missed Installation Appointments – Resale Design
- Percent Missed Installation Appointments – UNE Loop and Port Combos
- Percent Missed Installation Appointments – UNE Loops
- Percent Provisioning Troubles within 4 Days - Resale POTS
- Percent Provisioning Troubles within 4 Days - Resale Design
- Percent Provisioning Troubles within 4 Days - UNE Loop and Port Combos
- Percent Provisioning Troubles within 4 Days - UNE Loops
- Customer Trouble Report Rate – Resale POTS
- Customer Trouble Report Rate – Resale Design
- Customer Trouble Report Rate - UNE Loop and Port Combos
- Customer Trouble Report Rate - UNE Loops
- Percent Missed Repair Appointments – Resale POTS
- Percent Missed Repair Appointments - Resale Design
- Percent Missed Repair Appointments - UNE Loop and Port Combos
- Percent Missed Repair Appointments - UNE Loops
- Maintenance Average Duration – Resale POTS
- Maintenance Average Duration – Resale Design
- Maintenance Average Duration - UNE Loop and Port Combos
- Maintenance Average Duration - UNE Loops
- Maintenance Average Duration – IC Trunks
- Percent Repeat Troubles within 30 Days – Resale POTS
- Percent Repeat Troubles within 30 Days – Resale Design
- Percent Repeat Troubles within 30 Days - UNE Loop and Port Combos
- Percent Repeat Troubles within 30 Days - UNE Loops
- Billing Timeliness
- Billing Accuracy
- Usage Data Delivery Timeliness
- Usage Data Delivery Accuracy
- Percent Trunk Blockage
- LNP Disconnect Timeliness
- LNP Percent Missed Installation Appointment
- Coordinated Customer Conversions for UNE Loops
- Coordinated Customer Conversions for LNP
- Percent Missed Collocation Due Dates

VSEEMIII TIER-3 SUBMETRICS

- Percent Missed Installation Appointments – Resale POTS
- Percent Missed Installation Appointments – Resale Design
- Percent Missed Installation Appointments – UNE Loop and Port Combos
- Percent Missed Installation Appointments – UNE Loops
- Percent Missed Repair Appointments – Resale POTS
- Percent Missed Repair Appointments - Resale Design
- Percent Missed Repair Appointments - UNE Loop and Port Combos
- Percent Missed Repair Appointments - UNE Loops
- Billing Timeliness
- Billing Accuracy
- Percent Trunk Blockage
- Percent Missed Collocation Due Dates

VSEEM III	*MEASURES AND SUB-METRICS*	Retail Analogue	Surrogate Retail Analogue	Benchmark
Pre-Ordering	Percent Response Received within "2.3" seconds	x		
	OSS Interface Availability	x		
Ordering	Percent Flow-Through Service Request			90%
	Firm Order Confirmation Timeliness (Mechanized only)			95% within 4 hrs
	Reject Interval (Mechanized only)			95% within 1 hrs
Provisioning	Order Completion Interval (Dispatch only) – Resale POTS	x		
	Order Completion Interval (Dispatch only) – Resale Design	x		
	Order Completion Interval (No Dispatch only) – UNE Loop & Port Combos	x		
	Order Completion Interval (Dispatch only) – UNE Loops		POTS Dispatch 'w' orders	
	Order Completion Interval (Dispatch only) – IC Trunks	x		
	Percent Missed Installation Appointments – Resale POTS	x		
	Percent Missed Installation Appointments – Resale Design	x		
	Percent Missed Installation Appointments – UNE Loop and Port Combos	x		
	Percent Missed Installation Appointments – UNE Loops		95% within (POTS Dispatch + 4.5%)	
	Percent Provisioning Troubles within 4 Days - Resale POTS	x		
	Percent Provisioning Troubles within 4 Days - Resale Design	x		
	Percent Provisioning Troubles within 4 Days - UNE Loop and Port Combos	x		
	Percent Provisioning Troubles within 4 Days - UNE Loops		95% within (POTS Dispatch)	
Maintenance	Customer Trouble Report Rate – Resale POTS	x		
	Customer Trouble Report Rate – Resale Design	x		
	Customer Trouble Report Rate - UNE Loop and Port Combos	x		
	Customer Trouble Report Rate - UNE Loops			
	Percent Missed Repair Appointments – Resale POTS	x	95% within (POTS Dispatch + 3%)	
	Percent Missed Repair Appointments - Resale Design	x		
	Percent Missed Repair Appointments - UNE Loop and Port Combos	x		
	Percent Missed Repair Appointments - UNE Loops		95% within (Business POTS Dispatch + 8.5%)	
	Maintenance Average Duration – Resale POTS	x		
	Maintenance Average Duration – Resale Design	x		
	Maintenance Average Duration - UNE Loop and Port Combos	x		
	Maintenance Average Duration - UNE Loops		95% within (POTS Dispatch)	
	Maintenance Average Duration – IC Trunks	x		
	Percent Repeat Troubles within 30 Days – Resale POTS	x		
	Percent Repeat Troubles within 30 Days – Resale Design	x		
	Percent Repeat Troubles within 30 Days - UNE Loop and Port Combos	x		
	Percent Repeat Troubles within 30 Days - UNE Loops		POTS Dispatch + 9.5%	

Billing	Invoice Accuracy	x		
	Mean Time To Deliver Invoices	x		
	Usage Data Delivery Accuracy	x		
	Usage Data Delivery Timeliness	x		
Trunk Blockage	Trunk Group Service Report (Percent Trunk Blockage)	x		
LNP	Average Disconnect Timeliness Interval			UD
	Percent Missed Installation Appointments			UD
CC Conversions	Coordinated Customer Conversions – UNE Loop			95% < 15min
	Coordinated Customer Conversions – LNP			95% < 15 min
Collocation	% of Due Dates Missed			95% < 10%

NOTE: UD = Under Development

EXHIBIT C

Statistical Methods for BellSouth Performance Measure Analysis

I. Necessary Properties for a Test Methodology

The statistical process for testing if competing local exchange carriers (CLECs) customers are being treat equally with BellSouth (BST) customers involves more than just a mathematical formula. Three key elements need to be considered before an appropriate decision process can be developed. These are

- the type of data,
- the type of comparison, and
- the type of performance measure.

Once these elements are determined a test methodology should be developed that complies with the following properties.

- Like-to-Like Comparisons. When possible, data should be compared at appropriate levels, e.g. wire center, time of month, dispatched, residential, new orders. The testing process should:
  - Identify variables that may affect the performance measure.
  - Record these important confounding covariates.
  - Adjust for the observed covariates in order to remove potential biases and to make the CLEC and the ILEC units as comparable as possible.
- Aggregate Level Test Statistic. Each performance measure of interest should be summarized by one overall test statistic giving the decision maker a rule that determines whether a statistically significant difference exists. The test statistic should have the following properties.
  - The method should provide a single overall index, on a standard scale.
  - If entries in comparison cells are exactly proportional over a covariate, the aggregated index should be very nearly the same as if comparisons on the covariate had not been done.
  - The contribution of each comparison cell should depend on the number of observations in the cell.
  - Cancellation between comparison cells should be limited.
  - The index should be a continuous function of the observations.
- Production Mode Process. The decision system must be developed so that it does not require intermediate manual intervention, i.e. the process must be a "black box."

- Calculations are well defined for possible eventualities.
- The decision process is an algorithm that needs no manual intervention.
- Results should be arrived at in a timely manner.
- The system must recognize that resources are needed for other performance measure-related processes that also must be run in a timely manner.
- The system should be auditable, and adjustable over time.

- Balancing. The testing methodology should balance Type I and Type II Error probabilities.
  - P(Type I Error) = P(Type II Error) for well defined null and alternative hypotheses.
  - The formula for a test's balancing critical value should be simple enough to calculate using standard mathematical functions, i.e. one should avoid methods that require computationally intensive techniques.
  - Little to no information beyond the null hypothesis, the alternative hypothesis, and the number of observations should be required for calculating the balancing critical value.

In the following sections we describe appropriate testing processes that adhere as much as possible to the testing principles.

Measurement Types

The performance measures that will undergo testing are of three types:

1) means
2) proportions, and
3) rates

While all three have similar characteristics (a proportion is the average of a measure that takes on only the values of 0 or 1), a proportion or rate is derived from count data while a mean is generally an average of interval measurements.

II. Testing Methodology – The Truncated Z

Many covariates are chosen in order to provide deep comparison levels. In each comparison cell, a Z statistic is calculated. The form of the Z statistic may vary depending on the performance measure, but it should be distributed approximately as a standard normal, with mean zero and variance equal to one. Assuming that the test statistic is derived so that it is negative when the performance for the CLEC is worse than for the ILEC, a positive truncation is done – i.e. if the result is negative it is left alone, if the result is positive it is changed to zero. A weighted average of the truncated statistics is calculated where a cell weight depends on the volume of BST and CLEC orders in the cell. The weighted average is re-centered by the theoretical mean of a truncated distribution, and this is divided by the standard error of the weighted average. The standard error is computed assuming a fixed effects model.

Proportion Measures

For performance measures that are calculated as a proportion, in each adjustment cell, the truncated Z and the moments for the truncated Z can be calculated in a direct manner. In adjustment cells where proportions are not close to zero or one, and where the sample sizes are reasonably large, a normal approximation can be used. In this case, the moments for the truncated Z come directly from properties of the standard normal distribution. If the normal approximation is not appropriate, then the Z statistic is calculated from the hypergeometric distribution. In this case, the moments of the truncated Z are calculated exactly using the hypergeometric probabilities.

Rate Measures

The truncated Z methodology for rate measures has the same general structure for calculating the Z in each cell as proportion measures. For a rate measure, there are a fixed number of circuits or units for the CLEC, n_{2j} and a fixed number of units for BST, n_{1j}. Suppose that the performance measure is a "trouble rate." The modeling assumption is that the occurrence of a trouble is independent between units and the number of troubles in n circuits follows a Poisson distribution with mean λ n where λ is the probability of a trouble in 1 circuit and n is the number of circuits.

In an adjustment cell, if the number of CLEC troubles is greater than 15 and the number of BST troubles is greater than 15, then the Z test is calculated using the normal approximation to the Poisson. In this case, the moments of the truncated Z come directly from properties of the standard normal distribution. Otherwise, if there are very few troubles, the number of CLEC troubles can be modeled using a binomial distribution with n equal to the total number of troubles (CLEC plus BST troubles.) In this case, the moments for the truncated Z are calculated explicitly using the binomial distribution.

Mean Measures

For mean measures, an adjusted t statistic is calculated for each like-to-like cell which has at least 7 BST and 7 CLEC transactions. A permutation test is used when one or both of the BST and CLEC sample sizes is less than 6. Both the adjusted t statistic and the permutation calculation are described in the technical appendix.

APPENDIX
TECHNICAL DESCRIPTIONS

We start by assuming that any necessary trimming of the data is complete, and that the data are disaggregated so that comparisons are made within appropriate classes or adjustment cells that define "like" observations.

Notation and Exact Testing Distributions

Below, we have detailed the basic notation for the construction of the truncated z statistic. In what follows the word "cell" should be taken to mean a like-to-like comparison cell that has both one (or more) ILEC observation and one (or more) CLEC observation.

L = the total number of occupied cells

j = $1,\ldots,L$; an index for the cells

n_{1j} = the number of ILEC transactions in cell j

n_{2j} = the number of CLEC transactions in cell j

n_j = the total number transactions in cell j; $n_{1j}+ n_{2j}$

X_{1jk} = individual ILEC transactions in cell j; $k = 1,\ldots, n_{1j}$

X_{2jk} = individual CLEC transactions in cell j; $k = 1,\ldots, n_{2j}$

Y_{jk} = individual transaction (both ILEC and CLEC) in cell j

$$= \begin{cases} X_{1jk} & k = 1,K\ .n_{1j} \\ X_{2jk} & k = n_{1j}+1,K\ ,n_j \end{cases}$$

$\Phi^{-1}(\cdot)$ = the inverse of the cumulative standard normal distribution function

For Mean Performance Measures the following additional notation is needed.

$\overline{X}_{1j}$ = the ILEC sample mean of cell j

$\overline{X}_{2j}$ = the CLEC sample mean of cell j

s_{1j}^2 = the ILEC sample variance in cell j

s_{2j}^2 = the CLEC sample variance in cell j

y_{jk} = a random sample of size n_{2j} from the set of $Y_{j1},K\ ,Y_{jn_j}$; $k = 1,\ldots,n_{2j}$

M_j = the total number of distinct pairs of samples of size n_{1j} and n_{2j};

$$= \binom{n_j}{n_{1j}}$$

The exact parity test is the permutation test based on the "modified Z" statistic. For large

samples, we can avoid permutation calculations since this statistic will be normal (or Student's t) to a good approximation. For small samples, where we cannot avoid permutation calculations, we have found that the difference between "modified Z" and the textbook "pooled Z" is negligible. We therefore propose to use the permutation test based on pooled Z for small samples. This decision speeds up the permutation computations considerably, because for each permutation we need only compute the sum of the CLEC sample values, and not the pooled statistic itself.

A permutation probability mass function distribution for cell j, based on the "pooled Z" can be written as

$$PM(t) = P(\sum_k y_{jk} = t) = \frac{\textit{the number of samples that sum to } t}{M_j},$$

and the corresponding cumulative permutation distribution is

$$CPM(t) = P(\sum_k y_{jk} \le t) = \frac{\textit{the number of samples with sum } \le t}{M_j}.$$

For Proportion Performance Measures the following notation is defined

a_{1j}= the number of ILEC cases possessing an attribute of interest in cell j

a_{2j}= the number of CLEC cases possessing an attribute of interest in cell j

a_j = the number of cases possessing an attribute of interest in cell j; $a_{1j}+ a_{2j}$

The exact distribution for a parity test is the hypergeometric distribution. The hypergeometric probability mass function distribution for cell j is

$$HG(h) = P(H = h) = \begin{cases} \dfrac{\binom{n_{1j}}{h}\binom{n_{2j}}{a_j - h}}{\binom{n_j}{a_j}}, & \max(0, a_j - n_{2j}) \le h \le \min(a_j, n_{1j}) \\ 0 & \text{otherwise} \end{cases},$$

and the cumulative hypergeometric distribution is

$$CHG(x) = P(H \le x) = \begin{cases} 0 & x < \max(0, a_j - n_{1j}) \\ \sum_{h=\max(0, a_j - n_{1j})}^{x} HG(h), & \max(0, a_j - n_{1j}) \le x \le \min(a_j, n_{2j}) \\ 1 & x > \min(a_j, n_{2j}) \end{cases}.$$

For Rate Measures, the notation needed is defined as

b_{1j} = the number of ILEC base elements in cell j

b_{2j} = the number of CLEC base elements in cell j

b_j = the total number of base elements in cell j; $b_{1j} + b_{2j}$

$\bar{p}_{1j}$ = the ILEC sample rate of cell j; n_{1j}/b_{1j}

$\bar{p}_{2j}$ = the CLEC sample rate of cell j; n_{2j}/b_{2j}

q_j = the relative proportion of CLEC elements for cell j; b_{2j}/b_j

The exact distribution for a parity test is the binomial distribution. The binomial probability mass function distribution for cell j is

$$BN(k) = P(B = k) = \begin{cases} \binom{n_j}{k} q_j^k (1 - q_j)^{n_j - k}, & 0 \le k \le n_j \\ 0 & \text{otherwise} \end{cases},$$

and the cumulative binomial distribution is

$$CBN(x) = P(B \le x) = \begin{cases} 0 & x < 0 \\ \sum_{k=0}^{x} BN(k), & 0 \le x \le n_j \\ 1 & x > n_j \end{cases}.$$

Calculating the Truncated Z

The general methodology for calculating an aggregate level test statistic is outlined below.

1. **Calculate cell weights,** W_j. A weight based on the number of transactions is used so that a cell which has a larger number of transactions has a larger weight. The actual weight formulae will depend on the type of measure.

Mean Measure

$$W_j = \sqrt{\frac{n_{1j} n_{2j}}{n_j}}$$

Proportion Measure

$$W_j = \sqrt{\frac{n_{2j} n_{1j}}{n_j} \cdot \frac{a_j}{n_j} \cdot \left(1 - \frac{a_j}{n_j}\right)}$$

Rate Measure

$$W_j = \sqrt{\frac{b_{1j} b_{2j}}{b_j} \cdot \frac{n_j}{b_j}}$$

2. **In each cell, calculate a Z value,** Z_j. A Z statistic with mean 0 and variance 1 is needed for each cell.

   - If $W_j = 0$, set $Z_j = 0$.
   - Otherwise, the actual Z statistic calculation depends on the type of performance measure.

Mean Measure

$$Z_j = \Phi^{-1}(\alpha)$$

where α is determine by the following algorithm.

If $\min(n_{1j}, n_{2j}) > 6$, then determine α as

$$\alpha = P(t_{n_{1j}-1} \le T_j),$$

that is, α is the probability that a t random variable with $n_{1j} - 1$ degrees of freedom, is less than

$$T_j = t_j + \frac{g}{6}\left(\frac{n_{1j} + 2n_{2j}}{\sqrt{n_{1j}\, n_{2j}(n_{1j} + n_{2j})}}\right)\left(t^2 + \frac{n_{2j} - n_{1j}}{2n_{1j} + n_{2j}}\right),$$

where

$$t_j = \frac{\bar{X}_{1j} - \bar{X}_{2j}}{s_{1j}\sqrt{\frac{1}{n_{1j}} + \frac{1}{n_{2j}}}}$$

and the coefficient g is an estimate of the skewness of the parent population, which we assume is the same in all cells. It can be estimated from the ILEC values in the largest cells. This needs to be done only once for each measure. We have found that attempting to estimate this skewness parameter for each cell separately leads to excessive variability in the "adjusted" t. We therefore use a single compromise value in all cells.

Note, that t_j is the "modified Z" statistic. The statistic T_j is a "modified Z" corrected for the skewness of the ILEC data.

If $\min(n_{1j}, n_{2j}) \leq 6$, and

a) $M_j \leq 1{,}000$ (the total number of distinct pairs of samples of size n_{1j} and n_{2j} is 1,000 or less).

- Calculate the sample sum for all possible samples of size n_{2j}.
- Rank the sample sums from smallest to largest. Ties are dealt by using average ranks.
- Let R_0 be the rank of the observed sample sum with respect all the sample sums.

$$\alpha = 1 - \frac{R_0 - 0.5}{M_j}$$

b) $M_j > 1{,}000$

- Draw a random sample of 1,000 sample sums from the permutation distribution.
- Add the observed sample sum to the list. There is a total of 1001 sample sums. Rank the sample sums from smallest to largest. Ties are dealt by using average ranks.
- Let R_0 be the rank of the observed sample sum with respect all the sample sums.

$$\alpha = 1 - \frac{R_0 - 0.5}{1001}.$$

Proportion Measure

$$Z_j = \frac{n_j a_{1j} - n_{1j} a_j}{\sqrt{\frac{n_{1j} n_{2j} a_j (n_j - a_j)}{n_j - 1}}}.$$

Rate Measure

$$Z_j = \frac{n_{1j} - n_j q_j}{\sqrt{n_j q_j (1 - q_j)}}.$$

3. **Obtain a truncated Z value for each cell,** Z_j^*. To limit the amount of cancellation that takes place between cell results during aggregation, cells whose results suggest possible favoritism are left alone. Otherwise the cell statistic is set to zero. This means that positive equivalent Z values are set to 0, and negative values are left alone. Mathematically, this is written as

$$Z_j^* = \min(0, Z_j).$$

4. **Calculate the theoretical mean and variance of the truncated statistic under the null hypothesis of parity,** $E(Z_j^* | H_0)$ and $Var(Z_j^* | H_0)$. In order to compensate for the truncation in step 3, an aggregated, weighted sum of the Z_j^* will need to be centered and scaled properly so that the final aggregate statistic follows a standard normal distribution.

   - If $W_j = 0$, then no evidence of favoritism is contained in the cell. The formulae for calculating $E(Z_j^* | H_0)$ and $Var(Z_j^* | H_0)$ cannot be used. Set both equal to 0.

   - If $\min(n_{1j}, n_{2j}) > 6$ for a mean measure, $\min\left\{a_{1j}\left(1 - \frac{a_{1j}}{n_{1j}}\right), a_{2j}\left(1 - \frac{a_{2j}}{n_{2j}}\right)\right\} > 9$ for a proportion measure, or $\min(n_{1j}, n_{2j}) > 15$ and $n_j q_j (1 - q_j) > 9$ for a rate measure then

$$E(Z_j^* | H_0) = -\frac{1}{\sqrt{2\pi}}, \text{ and}$$

$$Var(Z_j^* | H_0) = \frac{1}{2} - \frac{1}{2\pi}.$$

- Otherwise, determine the total number of values for Z_j^*. Let z_{ji} and θ_{ji}, denote the values of Z_j^* and the probabilities of observing each value, respectively.

$$E(Z_j^* \mid H_0) = \sum_i \theta_{ji} z_{ji} \text{ ,and}$$

$$Var(Z_j^* \mid H_0) = \sum_i \theta_{ji} z_{ji}^2 - \left[E(Z_j^* \mid H_0)\right]^2.$$

The actual values of the z's and θ's depends on the type of measure, and the sums in the equations are over all possible values of the index i.

Mean Measure

$$N_j = \min(M_j, 1{,}000),\ i = 1,K\ , N_j$$

$z_{ji} = \min\left\{0, 1 - \Phi^{-1}\left(\frac{R_i - 0.5}{N_j}\right)\right\}$ where R_i is the rank of sample sum i

$$\theta_j = \frac{1}{N_j}$$

Proportion Measure

$$z_{ji} = \min\left\{0, \frac{n_j\, i - n_{1j}\, a_j}{\sqrt{\frac{n_{1j}\, n_{2j}\, a_j\, (n_j - a_j)}{n_j - 1}}}\right\},\quad i = \min(a_j, n_{2j}),K\ , \max(0, a_j - n_{1j})$$

$$\theta_{ji} = HG(i)$$

Rate Measure

$$z_{ji} = \min\left\{0, \frac{i - n_j\, q_j}{\sqrt{n_j\, q_j (1 - q_j)}}\right\},\quad i = 0,K\ , n_j$$

$$\theta_{ji} = BN(i)$$

5. **Calculate the aggregate test statistic, Z^T.**

$$Z^T = \frac{\sum_j W_j Z_j^* - \sum_j W_j E(Z_j^* \mid H_0)}{\sqrt{\sum_j W_j^2 Var(Z_j^* \mid H_0)}}$$

The Balancing Critical Value

There are four key elements of the statistical testing process:

1. the null hypothesis, H_0, that parity exists between ILEC and CLEC services
2. the alternative hypothesis, H_a, that the ILEC is giving better service to its own customers
3. the Truncated Z test statistic, Z^T, and
4. a critical value, c

The decision rule[1] is

- If $Z^T < c$ then accept H_a.
- If $Z^T \geq c$ then accept H_0.

There are two types of error possible when using such a decision rule:

Type I Error: Deciding favoritism exists when there is, in fact, no favoritism.
Type II Error: Deciding parity exists when there is, in fact, favoritism.

The probabilities of each type of each are:

Type I Error: $\alpha = P(Z^T < c \mid H_0)$.
Type II Error: $\beta = P(Z^T \geq c \mid H_a)$.

We want a balancing critical value, c_B, so that $\alpha = \beta$.

It can be shown that.

$$c_B = \frac{\sum_j W_j M(m_j, se_j) - \sum_j W_j \frac{-1}{\sqrt{2\pi}}}{\sqrt{\sum_j W_j^2 V(m_j, se_j)} + \sqrt{\sum_j W_j^2 \left(\frac{1}{2} - \frac{1}{2\pi}\right)}}.$$

where

$$M(\mu, \sigma) = \mu \Phi(\tfrac{-\mu}{\sigma}) - \sigma \phi(\tfrac{-\mu}{\sigma})$$

[1] This decision rule assumes that a negative test statistic indicates poor service for the CLEC customer. If the opposite is true, then reverse the decision rule.

$$V(\mu,\sigma) = (\mu^2 + \sigma^2)\Phi(\tfrac{-\mu}{\sigma}) - \mu\sigma\phi(\tfrac{-\mu}{\sigma}) - M(\mu,\sigma)^2$$

$\Phi(\cdot)$ is the cumulative standard normal distribution function, and $\phi(\cdot)$ is the standard normal density function.

This formula assumes that Z_j is approximately normally distributed within cell j. When the cell sample sizes, n_{1j} and n_{2j}, are small this may not be true. It is possible to determine the cell mean and variance under the null hypothesis when the cell sample sizes are small. It is much more difficult to determine these values under the alternative hypothesis. Since the cell weight, W_j will also be small (see calculate weights section above) for a cell with small volume, the cell mean and variance will not contribute much to the weighted sum. Therefore, the above formula provides a reasonable approximation to the balancing critical value.

The values of m_j and se_j will depend on the type of performance measure.

Mean Measure

For mean measures, one is concerned with two parameters in each cell, namely, the mean and variance. A possible lack of parity may be due to a difference in cell means, and/or a difference in cell variances. One possible set of hypotheses that capture this notion, and take into account the assumption that transaction are identically distributed within cells is:

$$H_0: \mu_{1j} = \mu_{2j},\ \sigma_{1j}^2 = \sigma_{2j}^2$$

$$H_a: \mu_{2j} = \mu_{1j} + \delta_j \cdot \sigma_{1j},\ \sigma_{2j}^2 = \lambda_j \cdot \sigma_{1j}^2 \qquad \delta_j > 0,\ \lambda_j \geq 1 \text{ and } j = 1,\ldots,L.$$

Under this form of alternative hypothesis, the cell test statistic Z_j has mean and standard error given by

$$m_j = \frac{-\delta_j}{\sqrt{\frac{1}{n_{1j}} + \frac{1}{n_{2j}}}}, \text{ and}$$

$$se_j = \sqrt{\frac{\lambda_j n_{1j} + n_{2j}}{n_{1j} + n_{2j}}}$$

Proportion Measure

For a proportion measure there is only one parameter of interest in each cell, the proportion of transaction possessing an attribute of interest. A possible lack of parity may be due to a difference in cell proportions. A set of hypotheses that take into account

the assumption that transaction are identically distributed within cells while allowing for an analytically tractable solution is:

$$H_0: \frac{p_{2j}(1-p_{1j})}{(1-p_{2j})p_{1j}} = 1$$

$$H_a: \frac{p_{2j}(1-p_{1j})}{(1-p_{2j})p_{1j}} = \psi_j \qquad \psi_j > 1 \text{ and } j = 1,\ldots,L.$$

These hypotheses are based on the "odds ratio." If the transaction attribute of interest is a missed trouble repair, then an interpretation of the alternative hypothesis is that a CLEC trouble repair appointment is ψ_j times more likely to be missed than an ILEC trouble.

Under this form of alternative hypothesis, the within cell asymptotic mean and variance of a_{1j} are given by[2]

$$E(a_{1j}) = n_j \pi_j^{(1)}$$

$$\text{var}(a_{1j}) = \frac{n_j}{\frac{1}{\pi_j^{(1)}} + \frac{1}{\pi_j^{(2)}} + \frac{1}{\pi_j^{(3)}} + \frac{1}{\pi_j^{(4)}}}$$

where

$$\pi_j^{(1)} = f_j^{(1)}\left(n_j^2 + f_j^{(2)} + f_j^{(3)} - f_j^{(4)}\right)$$
$$\pi_j^{(2)} = f_j^{(1)}\left(-n_j^2 - f_j^{(2)} + f_j^{(3)} + f_j^{(4)}\right)$$
$$\pi_j^{(3)} = f_j^{(1)}\left(-n_j^2 + f_j^{(2)} - f_j^{(3)} + f_j^{(4)}\right)$$
$$\pi_j^{(4)} = f_j^{(1)}\left(n_j^2\left(\tfrac{2}{\psi_j} - 1\right) - f_j^{(2)} - f_j^{(3)} - f_j^{(4)}\right)$$
$$f_j^{(1)} = \frac{1}{2n_j^2\left(\frac{1}{\psi_j} - 1\right)}$$
$$f_j^{(2)} = n_j n_{1j}\left(\tfrac{1}{\psi_j} - 1\right)$$
$$f_j^{(3)} = n_j a_j\left(\tfrac{1}{\psi_j} - 1\right)$$
$$f_j^{(4)} = \sqrt{n_j^2\left[4n_{1j}\left(n_j - a_j\right)\left(\tfrac{1}{\psi_j} - 1\right) + \left(n_j + \left(a_j - n_{1j}\right)\left(\tfrac{1}{\psi_j} - 1\right)\right)^2\right]}$$

[2] Stevens, W. L. (1951) Mean and Variance of an entry in a Contingency Table. *Biometrica*, **38**, 468-470.

Recall that the cell test statistic is given by

$$Z_j = \frac{n_j a_{1j} - n_{1j} a_j}{\sqrt{\frac{n_{1j} n_{2j} a_j (n_j - a_j)}{n_j - 1}}}.$$

Using the equations above, we see that Z_j has mean and standard error given by

$$m_j = \frac{n_j^2 \pi_j^{(1)} - n_{1j} a_j}{\sqrt{\frac{n_{1j} n_{2j} a_j (n_j - a_j)}{n_j - 1}}}, \text{ and}$$

$$se_j = \sqrt{\frac{n_j^3 (n_j - 1)}{n_{1j} n_{2j} a_j (n_j - a_j)\left(\frac{1}{\pi_j^{(1)}} + \frac{1}{\pi_j^{(2)}} + \frac{1}{\pi_j^{(3)}} + \frac{1}{\pi_j^{(4)}}\right)}}.$$

Rate Measure

A rate measure also has only one parameter of interest in each cell, the rate at which a phenomenon is observed relative to a base unit, e.g. the number of troubles per available line. A possible lack of parity may be due to a difference in cell rates. A set of hypotheses that take into account the assumption that transaction are identically distributed within cells is:

$$H_0: r_{1j} = r_{2j}$$

$$H_a: r_{2j} = \varepsilon_j r_{1j} \qquad \varepsilon_j > 1 \text{ and } j = 1,\ldots,L.$$

Given the total number of ILEC and CLEC transactions in a cell, n_j, and the number of base elements, b_{1j} and b_{2j}, the number of ILEC transaction, n_{1j}, has a binomial distribution from n_j trials and a probability of

$$q_j^* = \frac{r_{1j} b_{1j}}{r_{1j} b_{1j} + r_{2j} b_{2j}}.$$

Therefore, the mean and variance of n_{1j}, are given by

$$E(n_{1j}) = n_j q_j^*$$

$$\text{var}(n_{1j}) = n_j q_j^* (1 - q_j^*)$$

Under the null hypothesis

$$q_j^* = q_j = \frac{b_{1j}}{b_j},$$

but under the alternative hypothesis

$$q_j^* = q_j^a = \frac{b_{1j}}{b_{1j} + \varepsilon_j b_{2j}}.$$

Recall that the cell test statistic is given by

$$Z_j = \frac{n_{1j} - n_j q_j}{\sqrt{n_j q_j (1 - q_j)}}.$$

Using the relationships above, we see that Z_j has mean and standard error given by

$$m_j = \frac{n_j (q_j^a - q_j)}{\sqrt{n_j q_j (1 - q_j)}} = (1 - \varepsilon_j) \sqrt{\frac{n_j b_{1j} b_{2j}}{b_{1j} + \varepsilon_j b_{2j}}}, \text{ and}$$

$$se_j = \sqrt{\frac{q_j^a (1 - q_j^a)}{q_j (1 - q_j)}} = \sqrt{\varepsilon_j} \frac{b_j}{b_{1j} + \varepsilon_j b_{2j}}.$$

Determining the Parameters of the Alternative Hypothesis

In this appendix we have indexed the alternative hypothesis of mean measures by two sets of parameters, λ_j and δ_j. Proportion and rate measures have been indexed by one set of parameters each, ψ_j and ε_j respectively. While statistical science can be used to evaluate the impact of different choices of these parameters, there is not much that an appeal to statistical principles can offer in directing specific choices. Specific choices are best left to telephony experts. Still, it is possible to comment on some aspects of these choices:

- Parameter Choices for λ_j. The set of parameters λ_j index alternatives to the null hypothesis that arise because there might be greater unpredictability or variability in the delivery of service to a CLEC customer over that which would be achieved for an otherwise comparable ILEC customer. While concerns about differences in the variability of service are important, it turns out that the truncated Z testing which is being recommended here is relatively insensitive to all but very large values of the λ_j. Put another way, reasonable differences in the values chosen here could make very little difference in the balancing points chosen.

- Parameter Choices for δ_j. The set of parameters δ_j are much more important in the choice of the balancing point than was true for the λ_j. The reason for this is that they directly index differences in average service. The truncated Z test is very sensitive to any such differences; hence, even small disagreements among experts in the choice of the δ_j could be very important. Sample size matters here too. For example, setting all the δ_j to a single value – $\delta_j = \delta$ – might be fine for tests across individual CLECs where currently in Louisiana the CLEC customer bases are not too different. Using the same value of δ for the overall state testing does not seem sensible, however, since the state sample would be so much larger.

- Parameter Choices for ψ_j or ε_j. The set of parameters ψ_j or ε_j are also important in the choice of the balancing point for tests of their respective measures. The reason for this is that they directly index increases in the proportion or rate of service performance. The truncated Z test is sensitive to such increases; but not as sensitive as the case of δ_j for mean measures. Sample size matters here as well. As with mean measures, using the same value of ψ or ε for the overall state testing does not seem sensible since the state sample would be so much larger.

The bottom line here is that beyond a few general considerations, like those given above, a principled approach to the choice of the alternative hypotheses to guard against, must come from elsewhere.

Decision Process

Once Z^T has been calculated, it is compared to the balancing critical value to determine if the ILEC is favoring its own customers over a CLEC's customers.

This critical value changes as the ILEC and CLEC transaction volume change. One way to make this transparent to the decision maker, is to report the difference between the test statistic and the critical value, *diff* = $Z^T - c_B$. If favoritism is concluded when $Z^T < c_B$, then the *diff* < 0 indicates favoritism.

This make it very easy to determine favoritism: a positive *diff* suggests no favoritism, and a negative *diff* suggests favoritism.

EXHIBIT D

BST VSEEM REMEDY PROCEDURE

TIER-1 CALCULATION FOR RETAIL ANALOGUES:

1. Calculate the test statistic for each CLEC at the State Level; z_{CLEC1} (See Exhibit C)
2. Calculate the balancing critical value($^{C}B_{CLEC1}$) that is associated with the alternative hypothesis (that the CLEC mean does not exceed the ILEC mean by no more than $100\delta_B$% of an ILEC standard deviation; where, δ_B is fixed). (See Exhibit C)
3. If the State test statistic is equal to or falls above the State balancing critical value, stop here. Otherwise, go to step 4.
4. Calculate the Parity Gap by subtracting the value of step 2. from that of step 1.; $z_{CLEC1} - {}^{C}B_{CLEC1}$
5. Calculate the Volume Proportion using a linear distribution with slope of ¼. This can be accomplished by taking the absolute value of the Parity Gap from step 4. divided by 4; $ABS((z_{CLEC1} - {}^{C}B_{CLEC1}) / 4)$. All parity gaps equal or greater to 4 will result in a volume proportion of 100%.
6. Calculate the Affected Volume by multiplying the Volume Proportion from step 5. by the Total $CLEC_1$ Volume in the negatively affected cell; where the cell value is negative. (See Exhibit C)
7. Calculate the payment to CLEC-1 by multiplying the result of step 6. by the appropriate dollar amount from the fee schedule.

So, CLEC-1 payment = Affected $Volume_{CLEC1}$ * $$ from Fee Schedule

Example: CLEC-1 Missed Installation Appointments (MIA) for Resale POTS

	n_I	n_C	MIA_I	MIA_C	Z	C_B	**Parity Gap**	Volume Proportion	Affected Volume
State	50000	600	9%	16%	-1.92	-0.21	**1.71**	0.4275	
Cell									
1		150	0.091	0.112	-1.994				64
2		75	0.176	0.098	0.734				
3		10	0.128	0.333	-2.619				4
4		50	0.158	0.242	-2.878				21
5		15	0.245	0.075	1.345				
6		200	0.156	0.130	0.021				
7		30	0.166	0.233	-0.600				13
8		20	0.106	0.127	-0.065				9
9		40	0.193	0.218	-0.918				17
10		10	0.160	0.235	-0.660				4
									133

where n_I = ILEC observations and n_C = CLEC-1 observations

Payout for CLEC-1 is (133 units) * ($100/unit) = $13,300

TIER-2 CALCULATION for RETAIL ANALOGUES:

1. Calculate the test statistic for the CLEC Aggregate at the State Level using all transactions from the calendar quarter; z_{CLECA}

2. Calculate the balancing critical value($^{C}B_{CLECA}$) that is associated with the alternative hypothesis (that the CLEC mean does not exceed the ILEC mean by no more than $100\delta_B$% of an ILEC standard deviation; where, δ_B is fixed).

3. If the State test statistic is equal to or falls above the State balancing critical value for three consecutive months, stop here. Otherwise, go to step 4.

4. Calculate the Parity Gap by subtracting the value of step 2. from that of step 1.; $z_{CLECA} - {}^{C}B_{CLECA}$

5. Calculate the Volume Proportion using a linear distribution with slope of ¼. This can be accomplished by dividing the Parity Gap from step 4. by 4; $((z_{CLECA} - {}^{C}B_{CLECA}) / 4)$. All parity gaps equal or greater to 4 will result in a volume proportion of 100%.

6. Calculate the Affected Volume by multiplying the Volume Proportion from step 5. by the Total $CLEC_A$ Volume (CLEC Aggregate) in the negatively affected cell; where the cell value is negative (See Exhibit C).

7. Calculate the payment to CLEC-1 by multiplying the result of step 6. by the appropriate dollar amount from the fee schedule.

So, CLEC-A payment = Affected $Volume_{CLECA}$ * $$ from Fee Schedule

Example: CLEC-A Missed Installation Appointments (MIA) for Resale POTS

State Quarter1	n_I 180000	n_C 2100	MIA_I 9%	MIA_C 16%	Z -1.92	C_B -0.21	**Parity Gap 1.71**	Volume Proportion	Affected Volume
Cell									
1		500	0.091	0.112	-1.994				214
2		300	0.176	0.098	0.734				
3		80	0.128	0.333	-2.619				34
4		205	0.158	0.242	-2.878				88
5		45	0.245	0.075	1.345				
6		605	0.156	0.130	0.021				
7		80	0.166	0.233	-0.600				34
8		40	0.106	0.127	-0.065				17
9		165	0.193	0.218	-0.918				71
10		80	0.160	0.235	-0.660				34
									492

where n_I = ILEC observations and n_C = CLEC-A observations

Payout for CLEC-A is (492 units) * ($300/unit) = $147,600

Tier-3

Tier-3 uses the monthly CLEC Aggregate results. Tier-3 is triggered when five of the twelve Tier-3 sub-metrics experience consecutive failures in given calendar quarter. The table below displays a situation that would trigger a Tier-3 failure, and one that would not.

		TIER-3 FAILURE X = Miss			NOT A TIER-3 FAILURE X = Miss		
Process	Measures	Month 1	Month 2	Month 3	Month 1	Month 2	Month 3
Percent Missed Installation Appointments	Resale POTS	X	X	X	X		
	Resale Design	X			X	X	X
	UNE Loop & Port Combo		X				
	UNE Loops	X	X	X			
Percent Missed Repair Appointments	Resale POTS	X	X	X	X		X
	Resale Design		X	X		X	
	UNE Loop & Port Combo					X	X
	UNE Loops				X		
Billing	Billing Accuracy	X	X	X			
	Billing Timeliness				X	X	X
Trunk Blockage	Percent Trunk Blockage	X	X	X			
Collocation	Percent Missed Collocation Due Dates						

Tier-3 is effective immediately after quarter results, and can only be lifted when two of the five failed sub-metrics show compliance for two consecutive months in the following quarter.

All tiers standalone, such that triggering Tier-3 will not cease payout of any Tier-1 or Tier-2 failures.

TIER-1 CALCULATION FOR BENCHMARKS:

1. For each CLEC calculate monthly performance results.

2. If the percentage is equal to or exceeds the benchmark standard, stop here. Otherwise, go to step 3.

3. Determine the Volume Proportion by taking the difference between the benchmark and the actual performance result.

4. Calculate the Affected Volume by multiplying the Volume Proportion from step 3. by the Total $CLEC_1$ Volume.

5. Calculate the payment to CLEC-1 by multiplying the result of step 4. by the appropriate dollar amount from the fee schedule.

So, CLEC-1 payment = Affected $Volume_{CLEC1}$ * $$ from Fee Schedule

Example: CLEC-1 Missed Installation Appointments (MIA) for UNE Loops

	n_c	Benchmark	MIA_c	Volume Proportion	Affected Volume
State	600	9%	12%	.03	18

Payout for CLEC-1 is (18 units) * ($400/unit) = $7,200

* Adjustments will be made for small sample sizes

TIER-1 CALCULATION FOR BENCHMARKS (in the form of a target):

1. For each CLEC calculate monthly performance results.

2. Calculate the interval distribution based on the same data set used in step 1.

3. If the 'percent within' is equal to or exceeds the benchmark standard, stop here. Otherwise, go to step 4.

4. Determine the Volume Proportion by taking the difference between 100% and the actual performance result.

5. Calculate the Affected Volume by multiplying the Volume Proportion from step 4. by the Total $CLEC_1$ Volume.

6. Calculate the payment to CLEC-1 by multiplying the result of step 5. by the appropriate dollar amount from the fee schedule.

So, CLEC-1 payment = Affected $Volume_{CLEC1}$ * $$ from Fee Schedule

Example: CLEC-1 FOC Timeliness

	n_c	Benchmark	FOC_c	Volume Proportion	Affected Volume
State	600	95% within 1 hour	93% within 1 hour	.07	42

Payout for CLEC-1 is (42 units) * ($100/unit) = $4,200

* Adjustments will be made for small sample sizes

TIER-2 CALCULATIONS for BENCHMARKS:

Tier-2 calculations for benchmark measures are the same as the Tier-1 benchmark calculations except the CLEC Aggregate data for a given calendar quarter is being assessed.

* Adjustments will be made for small sample sizes

EXHIBIT E

Table-1

LIQUIDATED DAMAGES TABLE FOR TIER-1 MEASURES

PER AFFECTED ITEM						
	Month 1	Month 2	Month3	Month4	Month 5	Month 6
Ordering	$40	$50	$60	$70	$80	$90
Provisioning	$100	$125	$175	$250	$325	$500
Provisioning UNE (Coordinated Customer Conversions)	$400	$450	$500	$550	$650	$800
Maintenance and Repair	$100	$125	$175	$250	$325	$500
Maintenance and Repair UNE	$400	$450	$500	$550	$650	$800
LNP	$150	$250	$500	$600	$700	$800
IC Trunks	$100	$125	$175	$250	$325	$500
Collocation	$5,000	$5,000	$5,000	$5,000	$5,000	$5,000

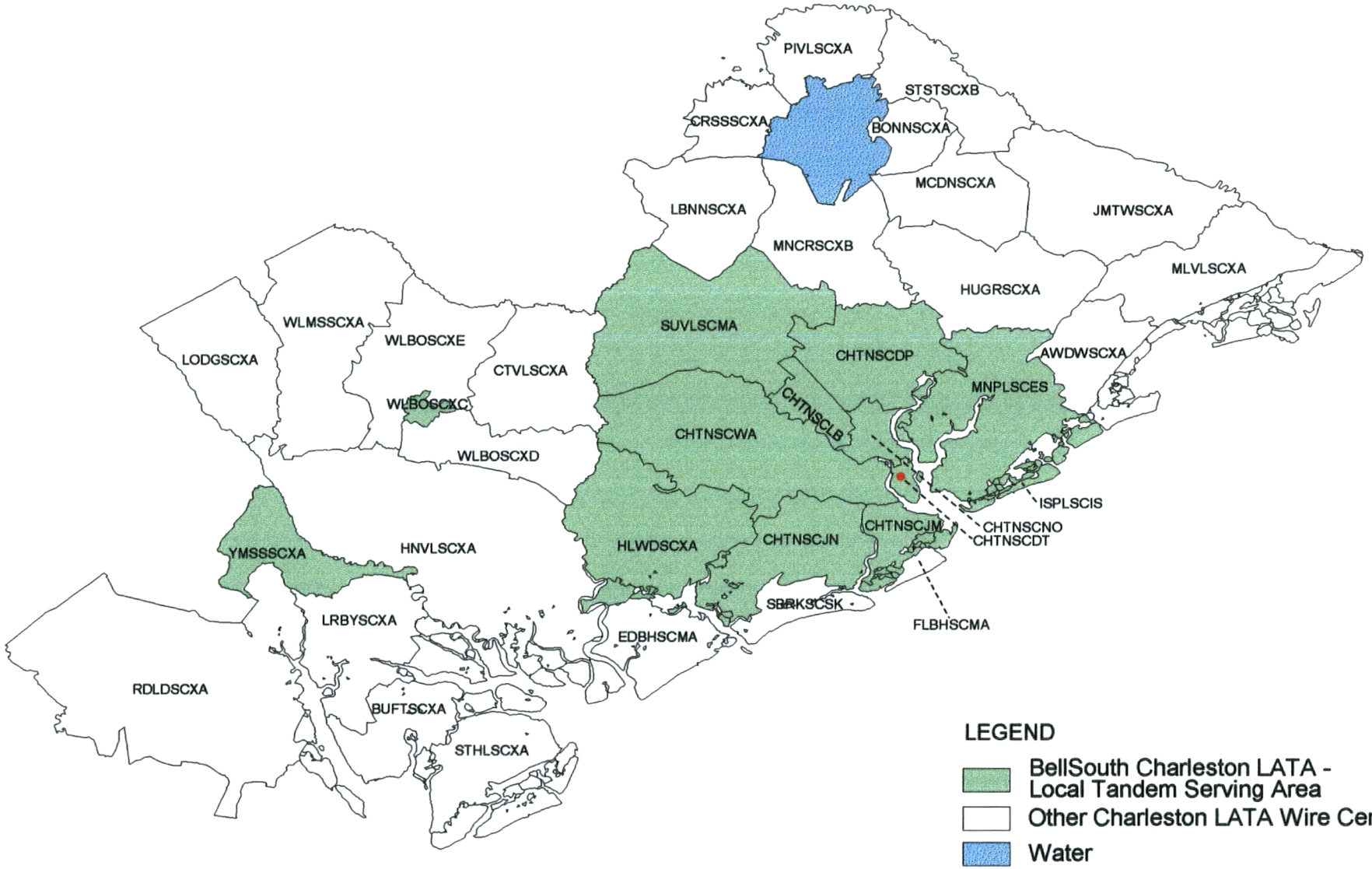
Table-2

VOLUNTARY PAYMENTS FOR TIER-2 MEASURES

	Per Affected Item
OSS Pre-Ordering	$20
Ordering	$60
Provisioning	$300
UNE Provisioning (Coordinated Customer Conversions)	$875
Maintenance and Repair	$300
UNE Maintenance and Repair	$875
Billing	$1.00
LNP	$500
IC Trunks	$500
Collocation	$15,000

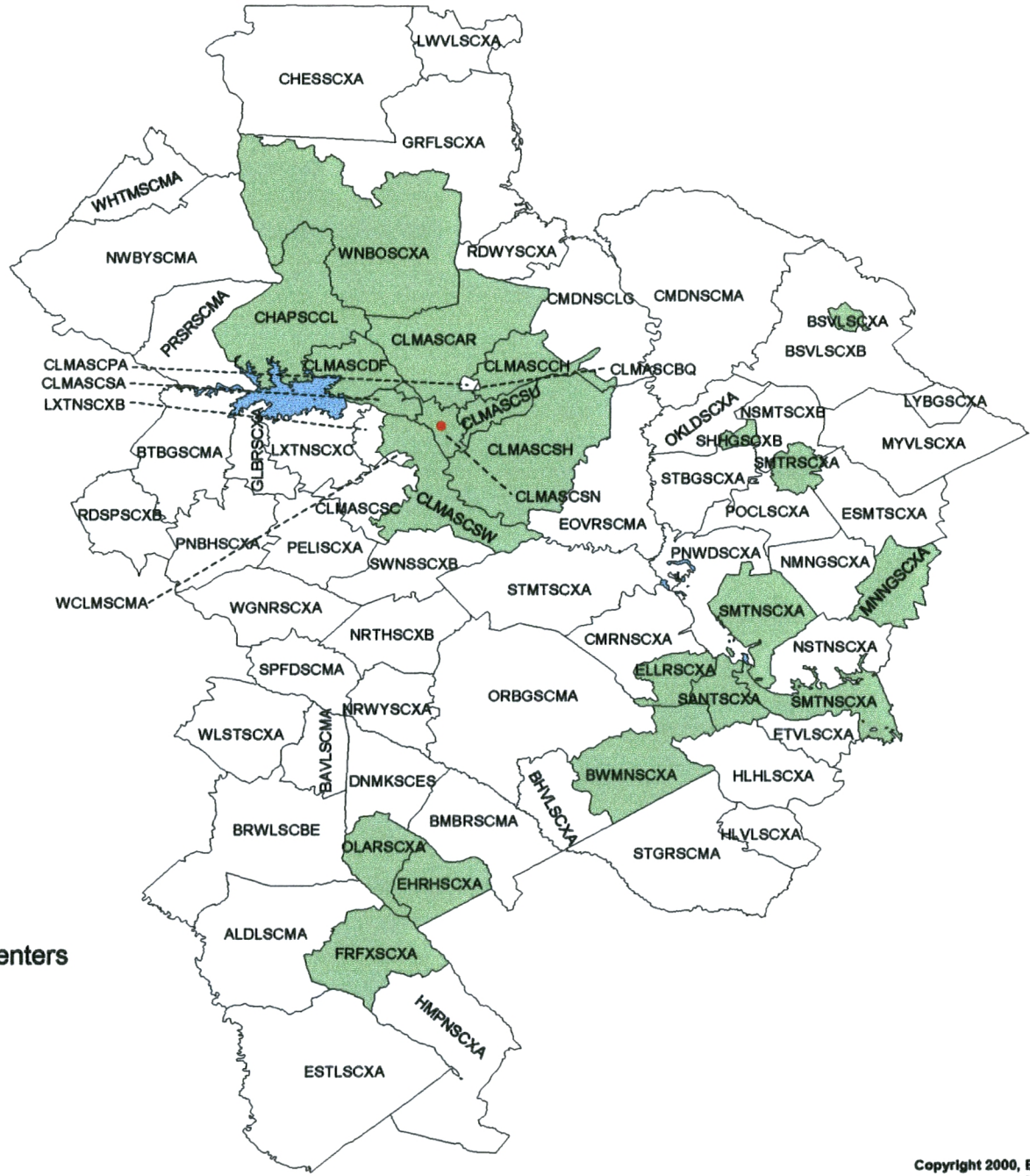
BELLSOUTH'S LATA MAPS INDICATING GEOGRAPHIC SERVING AREA OF BELLSOUTH'S LOCAL AND ACCESS TANDEMS FOR CHARLESTON, COLUMBIA, FLORENCE, GREENVILLE AND SPARTANBURG LATAS

BellSouth Charleston LATA - Local Tandem Serving Area



Date: 3-15-00

BellSouth Columbia LATA - Local Tandem Serving Area

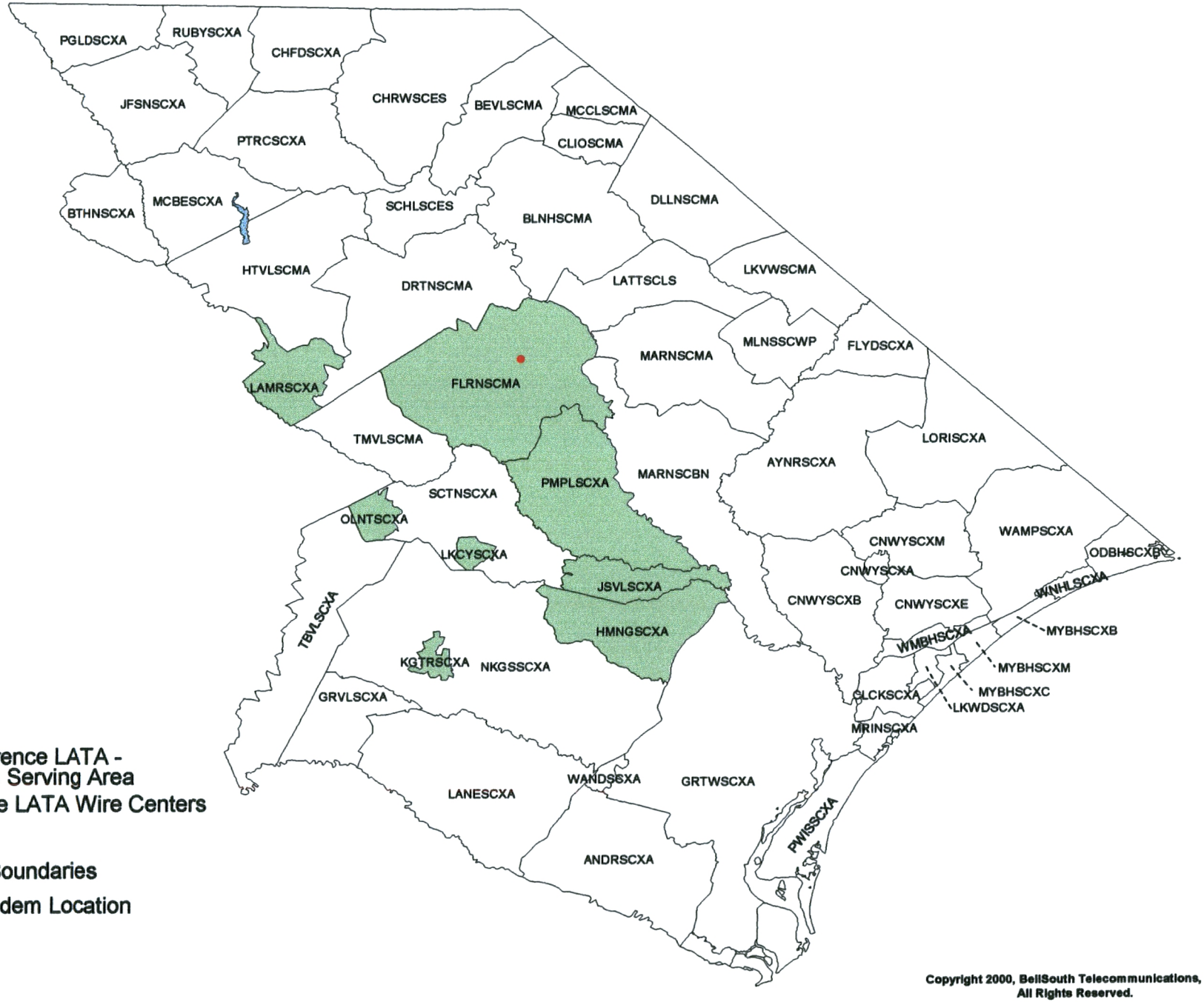


LEGEND

- BellSouth Columbia LATA - Local Tandem Serving Area
- Other Columbia LATA Wire Centers
- Water
- Wire Center Boundaries
- BellSouth Tandem Location

Date: 3-15-00

BellSouth Florence LATA - Local Tandem Serving Area

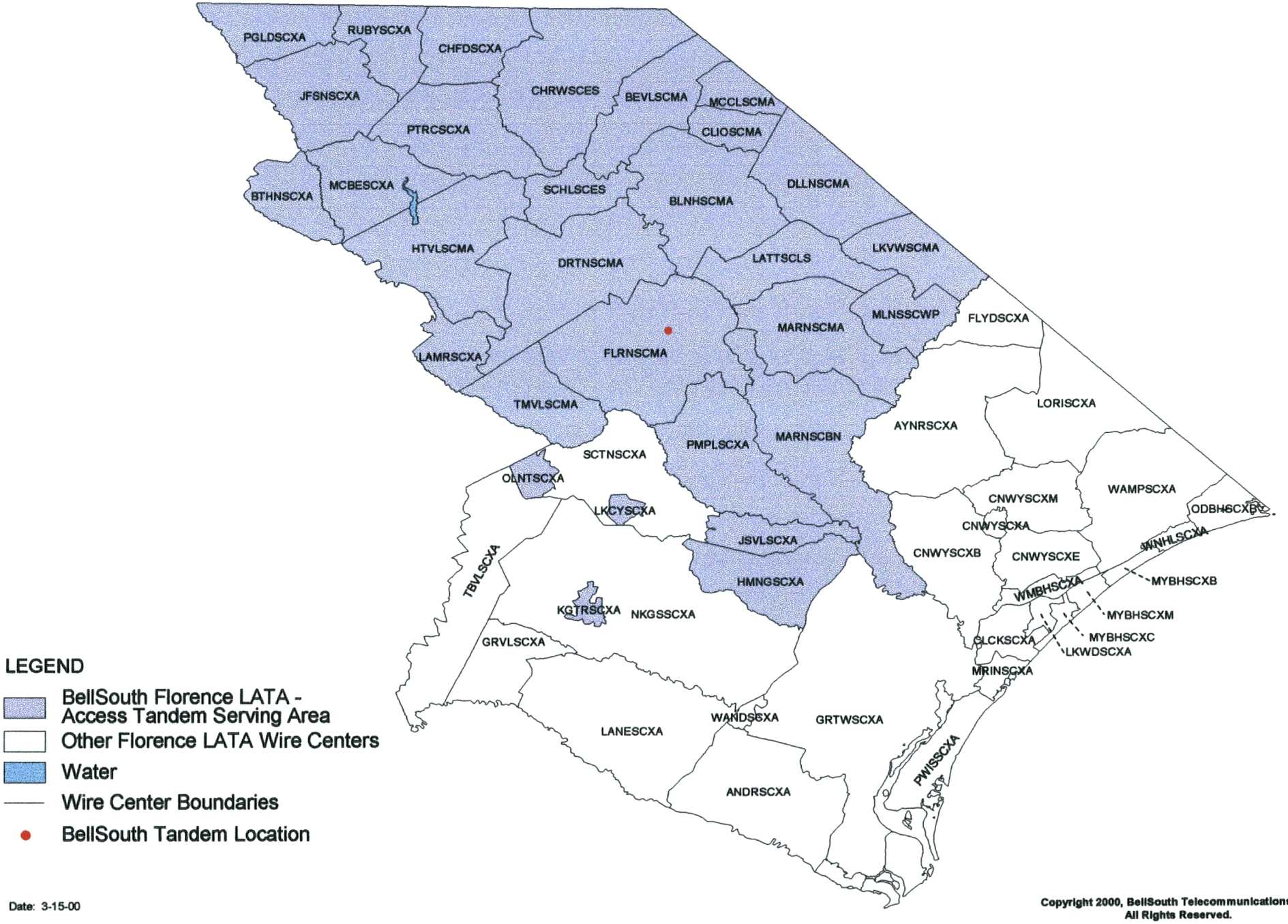


LEGEND

- BellSouth Florence LATA - Local Tandem Serving Area
- Other Florence LATA Wire Centers
- Water
- Wire Center Boundaries
- BellSouth Tandem Location

Date: 3-15-00

BellSouth Florence LATA - Access Tandem Serving Area

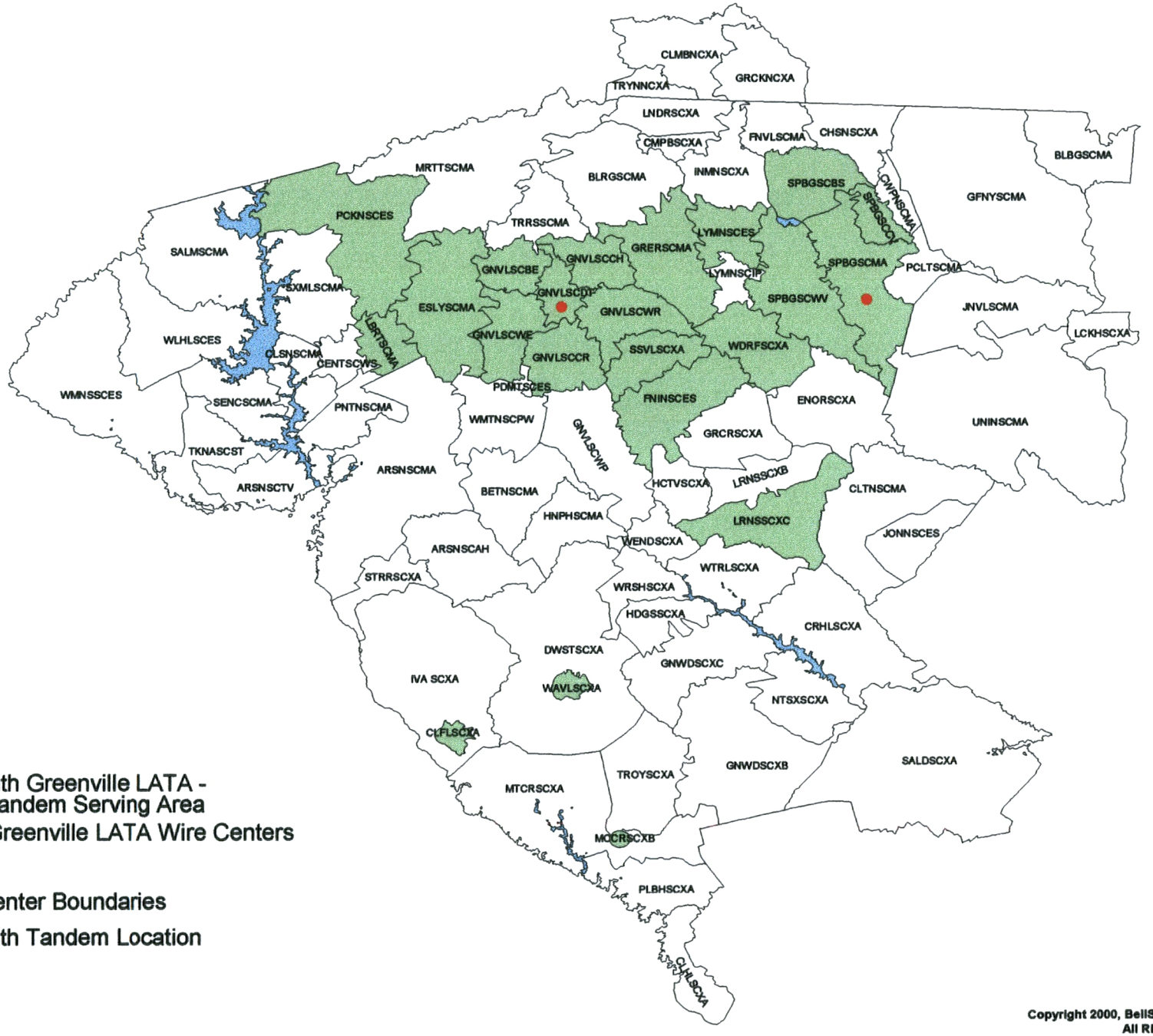


LEGEND

- BellSouth Florence LATA - Access Tandem Serving Area
- Other Florence LATA Wire Centers
- Water
- Wire Center Boundaries
- BellSouth Tandem Location

Date: 3-15-00

BellSouth Greenville LATA - Local Tandem Serving Area



LEGEND

- BellSouth Greenville LATA - Local Tandem Serving Area
- Other Greenville LATA Wire Centers
- Water
- Wire Center Boundaries
- BellSouth Tandem Location

Date: 3-15-00

South Carolina Rate and Cost Analysis

		Cost			Rate			
Cost Ref. #	Rate Element	Recurring	Non-recurring Electronic	Non-recurring Manual	Recurring	Non-recurring Electronic	Non-recurring Manual	Source
A.0	**Unbundled Local Loop**							
A.2	*Sub-Loop 2-Wire Analog*							
A.2.1	Sub-Loop Feeder per 2-wire analog Voice Grade Loop (SL1)	10.12		118.54 45.38	10.12		118.54 45.38	Cost Study
A.2.17	Sub-Loop – Per Cross Box Location – CLEC Feeder Facility Set-up			398.04			398.04	Cost Study
A.2.19	Sub-Loop – Per Building Equipment Room – CLEC Feeder Facility Set-up			395.68			395.68	Cost Study
A.2.23	Sub-Loop Feeder per 2-wire analog Voice Grade Loop (SL2)	13.72		197.17 84.16	13.72		197.17 84.16	Cost Study
A.2.24	Sub-Loop Feeder per 4-wire analog Voice Grade Loop/	26.49		317.49 161.28	26.49		317.49 161.28	Cost Study
A.2.25	Sub-Loop Feeder per ISDN Digital Grade Loop	24.39		278.72 111.38	24.39		278.72 111.38	Cost Study
A.2.29	Sub-Loop Feeder per 4-wire 56 or 64 KBPS Digital Grade Loop	32.93		317.49 161.28	32.93		317.49 161.28	Cost Study
A.2.30	Sub-Loop Feeder per 2-wire Copper Loop up to 18Kft	11.50		265.57 112.22	11.50		265.57 112.22	Cost Study
A.2.32	Sub-Loop Feeder per 4-wire Copper Loop up to 18Kft	17.00		317.49 161.28	17.00		317.49 161.28	Cost Study
A.2.2	Sub-Loop Distribution per 2-wire Analog Voice Grade Loop	8.03		104.92 38.42	8.03		104.92 38.42	Cost Study
A.2.18	Sub-Loop Distribution per Cross Box Location per 25 Pair Panel Set-up			67.26			67.26	Cost Study
A.2.20	Sub-Loop Distribution per Building Equipment Room per 25 Pair Panel Set-up			155.22			155.22	Cost Study
A.2.21	Sub-Loop Distribution per Cross Box Location CLEC Distribution Facility Set-up			398.04			398.04	Cost Study
A.2.22	Sub-Loop Distribution per Building Equipment Room CLEC Distribution Facility Set-up			395.68			395.68	Cost Study
A.2.11	Sub-Loop Distribution per 4-wire Analog Voice Grade Loop	10.52		263.47 97.61	10.52		263.47 97.61	Cost Study
A.2.40	Sub-Loop Distribution per 2-wire Copper Loop up to 18Kft	6.78		212.46 70.03	6.78		212.46 70.03	Cost Study

Shaded entries indicate rates previously established by the South Carolina Public Service Commission.

Under the non-recurring column, where there are two entries, the first entry is for the first unit installed, and the second entry is for each additional unit installed.

South Carolina Rate and Cost Analysis

		Cost			Rate			
Cost Ref. #	**Rate Element**	**Recurring**	**Non-recurring Electronic**	**Non-recurring Manual**	**Recurring**	**Non-recurring Electronic**	**Non-recurring Manual**	**Source**
A.2.42	Sub-Loop Distribution per 4-wire Copper Loop up to 18Kft	9.39		263.47 97.61	9.39		263.47 97.61	Cost Study
A.2.14	Sub-Loop Intrabuilding Network Cable (INC) per 2-wire Analog Voice Grade Loop	1.57		223.90 52.44	1.57		223.90 52.44	Cost Study
A.2.15	Sub-Loop Intrabuilding Network Cable (INC) per 4-wire Analog Voice Grade Loop	2.84		263.10 68.45	2.84		263.10 68.45	Cost Study
A.3	*Loop Channelization and CO Interface (inside CO)*							
A.3.4	Channelization – Channel System DS1 to DS0	147.51	220.89 137.15	246.48 146.07	147.51	220.89 137.15	246.48 146.07	Cost Study
A.3.5	Interface Unit – Interface DS1 to DS0 – OCU-DP Card	2.34	12.05 8.68	12.05 8.68	2.34	12.05 8.68	12.05 8.68	Cost Study
A.3.6	Interface unit – Interface DS1 – DS0 – BRITE Card	4.21	12.05 8.68	12.05 8.68	4.21	12.05 8.68	12.05 8.68	Cost Study
A.3.7	Interface Unit – Interface DS1 to DS0 – Voice Grade Card	1.47	12.05 8.68	12.05 8.68	1.47	12.05 8.68	12.05 8.68	Cost Study
A.3.8	Channelization – Channel System DS3 to DS1	200.01	321.54 234.30	347.13 243.22	200.01	321.54 234.30	347.13 243.22	Cost Study
A.3.9	Interface Unit – Interface DS3 to DS1	11.99	12.05 8.68	12.05 8.68	11.99	12.05 8.68	12.05 8.68	Cost Study
A.13	*2-Wire Copper Loops*							
A.13.1	2-Wire Copper Loop – Up to 18Kft	16.87		516.72 296.23	16.87		516.72 296.23	Cost Study
A.13.7	2-Wire Copper Loop – Greater than 18Kft	52.33		516.72 296.23	52.33		516.72 296.23	Cost Study
A.14	*4-Wire Copper Loops*							
A.14.1	4-Wire Copper Loop – Up to 18Kft	22.73		580.56 357.70	22.73		580.56 357.70	Cost Study
A.14.7	4-Wire Copper Loop – Greater than 18Kft	72.19		580.56 357.70	72.19		580.56 357.70	Cost Study

Shaded entries indicate rates previously established by the South Carolina Public Service Commission.

Under the non-recurring column, where there are two entries, the first entry is for the first unit installed, and the second entry is for each additional unit installed.

South Carolina Rate and Cost Analysis

		Cost			Rate			
Cost Ref. #	Rate Element	Recurring	Non-recurring Electronic	Non-recurring Manual	Recurring	Non-recurring Electronic	Non-recurring Manual	Source
A.15	*Unbundled Network Terminating Wire (NTW)*							
A.15.1	Unbundled Network Terminating Wire (NTW)	2.51	152.59	168.60	2.51	152.59	168.60	Cost Study
A.16	*High Capacity Unbundled Local Loops*							
A.16.1	High Capacity Unbundled Local Loop – DS3 – Facility Termination	421.60	735.42 519.31	789.68 573.57	421.60	735.42 519.31	789.68 573.57	Cost Study
A.16.2	High Capacity Unbundled Local Loop – DS3 – Per Mile	15.53			15.53			Cost Study
A.16.4	High Capacity Unbundled Local Loop – OC3 – Facility Termination	701.71	1,044.00 505.88	1098.26 560.14	701.71	1,044.00 505.88	1098.26 560.14	Cost Study
A.16.5	High Capacity Unbundled Local Loop – OC3 – Per Mile	11.78			11.78			Cost Study
A.16.7	High Capacity Unbundled Local Loop – OC12 – Facility Termination	2,663.00	1,259.00 505.88	1,313.26 560.14	2,663.00	1,259.00 505.88	1,313.26 560.14	Cost Study
A.16.8	High Capacity Unbundled Local Loop – OC12 – Per Mile	14.50			14.50			Cost Study
A.16.10	High Capacity Unbundled Local Loop – OC48 – Facility Termination	1,733.00	1,259.00 505.88	1,313.26 560.14	1,733.00	1,259.00 505.88	1,313.26 560.14	Cost Study
A.16.11	High Capacity Unbundled Local Loop – OC48 – Per Mile	47.57			47.57			Cost Study
A.16.13	High Capacity Unbundled Local Loop – OC48 – Interface OC12 on OC48	773.40	635.04 410.02	689.30 464.28	773.40	635.04 410.02	689.30 464.28	Cost Study
A.16.15	High Capacity Unbundled Local Loop – STS-1 – Facility Termination	431.32	735.42 519.31	789.68 573.57	431.32	735.42 519.31	789.68 573.57	Cost Study
A.16.16	High Capacity Unbundled Local Loop – STS-1 – Per Mile	15.53			15.53			Cost Study
A.17	*Unbundled Loop Modification*							
A.17.1	Unbundled Loop Modification - Load Coil/ Equipment Removal per pair for Loops up to 18Kft			69.45			69.45	Cost Study
A.17.2	Unbundled Loop Modification - Load Coil/ Equipment Removal per pair for Loops greater than 18Kft			758.85 23.54			758.85 23.54	Cost Study

Shaded entries indicate rates previously established by the South Carolina Public Service Commission.

Under the non-recurring column, where there are two entries, the first entry is for the first unit installed, and the second entry is for each additional unit installed.

South Carolina Rate and Cost Analysis

Cost Ref. #	Rate Element	Cost			Rate			Source
		Recurring	Non-recurring Electronic	Non-recurring Manual	Recurring	Non-recurring Electronic	Non-recurring Manual	
A.17.3	Unbundled Loop Modification - Bridged Tap Removal per pair unloaded			104.90			104.90	Cost Study
A.19	*Loop Testing*							
A.19.1	Loop Testing Beyond Voice Grade – Basic, per half hour		115.74 51.07	131.75 51.07		115.74 51.07	131.75 51.07	Cost Study
A.19.2	Loop Testing Beyond Voice Grade – Overtime, per half hour		134.17 57.11	150.18 57.11		134.17 57.11	150.18 57.11	Cost Study
A.19.3	Loop Testing Beyond Voice Grade – Premium, per half hour		152.59 63.15	168.60 63.15		152.59 63.15	168.60 63.15	Cost Study
D.0	**Unbundled Transport and Local Interoffice Transport**							
D.5	*Local Channel - Dedicated*							
D.5.7	Local Channel - Dedicated - DS3 - Per Mile	12.08			12.08			Cost Study
D.5.8	Local Channel – Dedicated – DS3 – Facility Termination	493.31	735.42 519.31	789.68 573.57	493.31	735.42 519.31	789.68 573.57	Cost Study
D.5.10	Local Channel – Dedicated – OC3 – Per Mile	10.15			10.15			Cost Study
D.5.11	Local Channel – Dedication – OC3 – Facility Termination	1,005.00	1,044.00 505.88	1,098.26 560.14	1,005.00	1,044.00 505.88	1,098.26 560.14	Cost Study
D.5.13	Local Channel – Dedicated – OC12 – Per Mile	14.50			14.50			Cost Study
D.5.14	Local Channel – Dedicated – OC12 – Facility Termination	4,414.00	1,259.00 505.88	1,313.26 560.14	4,414.00	1,259.00 505.88	1,313.26 560.14	Cost Study
D.5.16	Local Channel – Dedicated – OC48 – Per Mile	47.57			47.57			Cost Study
D.5.17	Local Channel – Dedicated – OC48 – Facility Termination	1,842.00	1,259.00 505.88	1,313.26 560.14	1,842.00	1,259.00 505.88	1,313.26 560.14	Cost Study
D.5.19	Local Channel – Dedicated – OC48 – Interface OC12 on OC48	767.50	635.04 410.02	689.30 464.28	767.50	635.04 410.02	689.30 464.28	Cost Study
D.5.23	Local Channel – Dedicated – STS-1 – Per Mile	12.08			12.08			Cost Study
D.5.21	Local Channel – Dedicated – STS-1 – Facility Termination	481.14	735.42 519.31	789.68 573.57	481.14	735.42 519.31	789.68 573.57	Cost Study
D.6	*Interoffice Transport – Dedicated – DS3*							

Shaded entries indicate rates previously established by the South Carolina Public Service Commission.

Under the non-recurring column, where there are two entries, the first entry is for the first unit installed, and the second entry is for each additional unit installed

South Carolina Rate and Cost Analysis

Cost Ref. #	Rate Element	Cost			Rate			Source
		Recurring	Non-recurring Electronic	Non-recurring Manual	Recurring	Non-recurring Electronic	Non-recurring Manual	
D.6.1	Interoffice Transport – Dedicated – DS3 – Per Mile	8.13			8.13			Cost Study
D.6.2	Interoffice Transport – Dedicated – DS3 – Facility Termination	967.70	606.72 423.45	660.98 477.71	967.70	606.72 423.45	660.98 477.71	Cost Study
D.7	*Interoffice Transport – Dedicated – OC3*							
D.7.1	Interoffice Transport – Dedicated – OC3 – Per Mile	9.75			9.75			Cost Study
D.7.2	Interoffice Transport – Dedicated – OC3 – Facility Termination	2,802.00	915.64 410.02	969.90 464.28	2,802.00	915.64 410.02	969.90 464.28	Cost Study
D.8	*Interoffice Transport – Dedicated – OC12*							
D.8.1	Interoffice Transport – Dedicated – OC12 – Per Mile	32.52			32.52			Cost Study
D.8.2	Interoffice Transport – Dedicated – OC12 – Facility Termination	11,132.00	1,131.00 410.02	1,185.26 464.28	11,132.00	1,131.00 410.02	1,185.26 464.28	Cost Study
D.9	*Interoffice Transport – Dedicated – OC48*							
D.9.1	Interoffice Transport – Dedicated – OC48 – Per Mile	45.92			45.92			Cost Study
D.9.2	Interoffice Transport – Dedicated – OC48 – Facility Termination	12,462.00	1,131.00 410.02	1,185.26 464.28	12,462.00	1,131.00 410.02	1,185.26 464.28	Cost Study
D.9.4	Interoffice Transport – Dedicated – OC48 – Interface OC12 on OC48	1,561.00	635.04 410.02	689.30 464.28	1,561.00	635.04 410.02	689.30 464.28	Cost Study
D.10	*Interoffice Transport – Dedicated – STS-1*							
D.10.1	Interoffice Transport – Dedicated – STS-1 – Per Mile	8.13			8.13			Cost Study
D.10.2	Interoffice Transport – Dedicated – STS-1 – Facility Termination	967.58	606.72 423.45	660.98 477.71	967.58	606.72 423.45	660.98 477.71	Cost Study
E.0	**Signaling Network, Databases, & Service Management Systems**							
E.4	*Calling Name (CNAM) per Query Billing Database*							
E.4.1	CNAM for DB Owners – Service Establishment, Manual			128.62 39.42			128.62 39.42	Cost Study

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South Carolina Rate and Cost Analysis

		Cost			Rate			
Cost Ref. #	**Rate Element**	**Recurring**	**Non-recurring Electronic**	**Non-recurring Manual**	**Recurring**	**Non-recurring Electronic**	**Non-recurring Manual**	**Source**
E.4.2	CNAM for Non DB Owners – Service Establishment, Manual			128.62 39.42			128.62 39.42	Cost Study
E.4.3	CNAM for DB Owners – Service Provisioning with Point Code Establishment			2,969.00 2,398.00			2,969.00 2,398.00	Cost Study
E.4.4	CNAM for Non DB Owners – Service Provisioning with Point Code Establishment			1,819.00 1,117.00			1,819.00 1,117.00	Cost Study
E.4.5	CNAM for DB and Non DB Owners, per query	.0010231			.0010231			Cost Study
E.5	*BellSouth Access to E911 Service*							
E.5.1	BellSouth E911 Access – Local Channel – Dedicated – 2-wire Voice Grade				16.83	554.00 88.58	597.75 102.13	6/1/98 Order in Docket 97-374-C
E.5.2	BellSouth E911 Access – Interoffice Transport – Dedicated – 2-wire Voice Grade, per mile				.0373			6/1/98 Order in Docket 97-374-C
E.5.3	BellSouth E911 Access – Interoffice Transport – Dedicated – 2-wire Voice Grade, per facility termination				21.42	136.44 51.37	176.07 91.00	6/1/98 Order in Docket 97-374-C
E.5.4	BellSouth E911 Access – Local Channel – Dedicated – DS1				37.20	534.81 462.81	622.80 465.92	6/1/98 Order in Docket 97-374-C
E.5.5	BellSouth E911 Access – Interoffice Transport – Dedicated - DS1, per mile				.7598			6/1/98 Order in Docket 97-374-C
E.5.6	BellSouth E911 Access – Interoffice Transport – Dedicated – DS1, per facility termination				94.98	216.27 162.70	255.90 202.33	6/1/98 Order in Docket 97-374-C
E.6	*Local Number Portability (LNP) Per Query*							
E.6.1	LNP Cost per query	.0008367			.0008367			Cost Study
F.0	**Operations Support Systems (OSS)**							
F.1	*Operational Support Systems (OSS)*							
F.1.7	Manual per LSR received from the CLEC by means other than one of the OSS interactive interfaces			13.80			13.80	Cost Study
	Electronic per LSR received from the CLEC by one of the OSS interactive interfaces					10.62		6/1/98 Order in Docket 97-374-C

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South Carolina Rate and Cost Analysis

Cost Ref. #	Rate Element	Cost			Rate			Source
		Recurring	Non-recurring Electronic	Non-recurring Manual	Recurring	Non-recurring Electronic	Non-recurring Manual	
	OSS Interactive Ordering and Trouble Maintenance, Establishment, per user				50.00	100.00		6/1/98 Order in Docket 97-374-C
H.0	**Collocation**							
H.1	*Physical Collocation*							
H.1.37	Physical Collocation – Security Access System – Security System, per Central Office	115.55			115.55			Cost Study
H.1.38	Physical Collocation – Security Access System – New Access Card Activation, per Card	.0659		55.05	.0659		55.05	Cost Study
H.1.39	Physical Collocation – Security Access System – Administrative Charge, Existing Card, per Card			15.44			15.44	Cost Study
H.1.40	Physical Collocation – Security Access System – Replace Lost or Stolen Card, per Card			45.13			45.13	Cost Study
H.1.41	Physical Collocation – Space Preparation – C.O. Modification per square foot	2.71			2.71			Cost Study
H.1.42	Physical Collocation – Space Preparation – Common Systems Modification per square foot – Cageless	3.67			3.67			Cost Study
H.1.43	Physical Collocation – Space Preparation – Common Systems Modification per Cage	124.80			124.80			Cost Study
H.1.44	Physical Collocation – Space Preparation – Power per Fused –48v DC Amp	7.03			7.03			Cost Study
H.3	*Assembly Point*							
H.3.1	Assembly Point: 2-wire Cross Connects	.7944	33.61 31.74	36.57 34.70	.7944	33.61 31.74	36.57 34.70	Cost Study
H.3.2	Assembly Point: 4-wire Cross Connects	1.59	33.64 31.69	36.58 34.63	1.59	33.64 31.69	36.58 34.63	Cost Study
H.3.3	Assembly Point: DS-1 Cross Connects	12.79	53.10 40.12	56.07 43.09	12.79	53.10 40.12	56.07 43.09	Cost Study

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South Carolina Rate and Cost Analysis

Cost Ref. #	Rate Element	Cost			Rate			Source
		Recurring	Non-recurring Electronic	Non-recurring Manual	Recurring	Non-recurring Electronic	Non-recurring Manual	
H.4	*Adjacent Collocation*							
H.4.1	Adjacent Collocation – Space Cost per square ft.	.1370			.1370			Cost Study
H.4.2	Adjacent Collocation – Electrical Facility Cost per linear foot	6.47			6.47			Cost Study
H.4.3	Adjacent Collocation – 2-wire Cross Connects	.0652	33.61 31.74	36.57 34.70	.0652	33.61 31.74	36.57 34.70	Cost Study
H.4.4	Adjacent Collocation – 4-wire Cross Connects	.1303	33.64 31.69	36.58 34.63	.1303	33.64 31.69	36.58 34.63	Cost Study
H.4.5	Adjacent Collocation – DS1 Cross Connects	1.14	53.10 40.12	56.07 43.09	1.14	53.10 40.12	56.07 43.09	Cost Study
H.4.6	Adjacent Collocation – DS3 Cross Connects	15.39	52.24 38.86	55.21 41.83	15.39	52.24 38.86	55.21 41.83	Cost Study
H.4.7	Adjacent Collocation – 2-Fiber Cross Connects	2.61	52.24 38.86	55.21 41.83	2.61	52.24 38.86	55.21 41.83	Cost Study
H.4.8	Adjacent Collocation – 4-Fiber Cross Connects	4.98	64.83 51.45	67.80 54.42	4.98	64.83 51.45	67.80 54.42	Cost Study
H.4.9	Adjacent Collocation – Application Cost			1,559.00			1,559.00	Cost Study
H.4.16	Adjacent Collocation – 120V, Single Phase Standby Power Cost	5.64			5.64			Cost Study
H.4.17	Adjacent Collocation – 240V, Single Phase Standby Power Cost per AC Breaker AMP	11.29			11.29			Cost Study
H.4.18	Adjacent Collocation – 120V, Three Phase Standby Power Cost per AC Breaker AMP	16.94			16.94			Cost Study
H.4.19	Adjacent Collocation – 240V, Three Phase Standby Power Cost per AC Breaker AMP	39.10			39.10			Cost Study
H.5	*DSLAM Collocation In a Remote Terminal (RT)*							
H.5.1	Collocation in the Remote Terminal per Vertical Rack (1-3/4")	74.33		637.36 65.62	74.33		637.36 65.62	Cost Study
H.5.2	Collocation in the Remote Terminal per Line Activation	2.17		103.18 47.88	2.17		103.18 47.88	Cost Study
J.0	**Other**							

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South Carolina Rate and Cost Analysis

		Cost			Rate			
Cost Ref. #	Rate Element	Recurring	Non-recurring Electronic	Non-recurring Manual	Recurring	Non-recurring Electronic	Non-recurring Manual	Source
J.3	*Loop Qualification*							
J.3.1	Loop Qualification Database	1.09			1.09			Cost Study
J.3.3	Loop Qualification – Service Inquiry with Loop Make-up			175.39			175.39	Cost Study
J.5	*Access to the DCS – Customer Reconfiguration*							
J.5.1	Customer Reconfiguration Establishment			5.58			5.58	Cost Study
J.5.2	DS1 DSC Termination with DS0 Switching	27.98		48.09 47.51	27.98		48.09 47.51	Cost Study
J.5.3	DS1 DSC Termination with DS1 Switching	10.61		27.68 27.10	10.61		27.68 27.10	Cost Study
J.5.4	DS3 DSC Termination with DS1 Switching	193.01		48.09 47.51	193.01		48.09 47.51	Cost Study

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STATE OF SOUTH CAROLINA)
) CERTIFICATE OF SERVICE
COUNTY OF RICHLAND)

The undersigned, Nyla M. Laney, hereby certifies that she is employed by the Legal Department for BellSouth Telecommunications, Inc. ("BellSouth") and that she has caused the Direct Testimony of Alphonso J. Varner filed on behalf of BellSouth Telecommunications, Inc. in Docket No. 2000-040-C to be served this March 24, 2000 by the method indicated below each addressee listed:

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Nyla M. Laney

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